The “10 Keys”™ to Healthy Aging

Workbook

Center for Aging and Population Health
Prevention Research Center
University of Pittsburgh

2016
Medical Disclaimer:

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Center for Aging and Population Health, A Centers for Disease Control Prevention Research Center, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pennsylvania

The University of Pittsburgh’s Center for Aging and Population Health is a member of the Prevention Research Centers Program, supported by the Centers for Disease Control and Prevention cooperative agreement number U48DP005001-02, 1 U48DP005001-01, and U48DP01918-02.

Printing of this publication was supported by the Centers for Disease Control and Prevention cooperative agreement number U48DP019.

Summary of updates in the 3/21/2016 release of the “10 Keys™” to Healthy Aging Workbook

There are no major changes to national guidelines to report since the 2015 release of the "10 Keys"™ to Healthy Aging and Workbook; however, we did make minor updates to some Keys, as outlined below.

◊ Web links and resources listed are up-to-date.

Key 3- Participate in Cancer Screening

◊ Page 3.2: We updated the list of cancer warning signs outlined by the American Cancer Society. The list now includes “white patches inside the mouth or white spots on the tongue.”

◊ Pages 3.2 & 3.7: The updated US Preventative Services Task Force (USPSTF) recommendation for mammograms is every two years for women ages 50-74 in the general population.

Key 4- Get Immunized Regularly

◊ Page 4.3: We noted that the Tdap vaccine includes Td, and that it is safe to get Tdap no matter when last Td was received.

◊ Page 4.7: We clarified the vaccine schedule to state that the four vaccines at the bottom of the chart are necessary if a person is at risk and a doctor has indicated s/he needs the vaccine. These vaccines include Hepatitis A, Hepatitis B, Varicella (Chicken Pox), and Measles/Mumps/Rubella (MMR).

Key 8– Maintain Healthy Bones, Joints, and Muscles

• Page 8.4: We updated the recommendations for calcium and vitamin D intake according to recent updates by the Dietary Guidelines for Americans 2015-2020. The guidelines distinguish intake by gender and age. The recommended intake of calcium for women ages 51 and older is 1200 mg a day. For men ages 51-70 calcium intake should be 1000mg a day, and 1200 mg a day for men ages 71 and older. The recommended intake of vitamin D is 600 IU a day for men and women age 51-70, and 800 IU a day for those ages 71 and older.
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# Introduction

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Source: ©Microsoft Office Online, Clip Art, Senior Citizens
The Center for Aging and Population Health - Prevention Research Center (CAPH-PRC) was established in 2001 at the University of Pittsburgh’s Graduate School of Public Health by a grant from the Centers for Disease Control and Prevention (CDC). The CDC Prevention Research Centers (PRC) have a nationwide network.

The CAPH-PRC in Pittsburgh is unique from other CDC centers around the country in that it focuses on health promotion and disease prevention in individuals 50 years of age and older. The CAPH-PRC is proud to be a part of the CDC network.

The Community Ambassador program was an important activity of the first years of the Center and was the Center’s cornerstone for an ambitious community outreach campaign. Currently the “10 Keys”™ to Healthy Aging is being used in communities around the world to offer a bundled health promotion and chronic disease prevention program.

This workbook will prepare you to become an advocate for the “10 Keys”™ to Healthy Aging. We are pleased that you have decided to become a part of a team of individuals committed to working together to build a healthier community.
Note to those who will use The “10 Keys”™ to Healthy Aging Participant Workbook:

The “10 Keys”™ to Healthy Aging guidelines used throughout this book were developed from evidence-based research in individuals age 65 years and older. With some modifications, the guidelines can be adapted to be proactive to meet the needs of adults age 50 years and older.

The “10 Keys”™ to Healthy Aging Workbook contains the most up-to-date prevention guidelines available at the time of publication. We use recommendations with a strong scientific evidence base from leading groups such as the Centers for Disease Control, United States Preventive Services Task Force, and Institute of Medicine to inform our content.

Since science is always changing, we do a complete review of the “10 Keys”™ content on a biannual basis, which includes a detailed review by leading experts in each of the “Key” content areas. Updates with late-breaking prevention news can be found on the CAPH Prevention Research Center website: [http://www.caph.pitt.edu](http://www.caph.pitt.edu)

This version of the Workbook was finalized on March 21, 2016.

As always, the guidelines in this Workbook should be used in partnership with your regular healthcare provider to determine the best prevention plan for you.

The “10 Keys”™ program can be tailored in length to meet the needs of various organizations, individuals, and communities. As a participant in the program, you will have an opportunity to practice skills and learn about:

- the importance of preventing disease and disability
- the background of the Keys to Healthy Aging
- the aging of America
- information on each of the “10 Keys”™
- your own risk factors
Introduction

How is the “10 Keys”™ Workbook Organized?

The Workbook includes this introduction section, as well as one section for each of the “10 Keys”™. The Keys are numbered from 1 to 10, and could be presented to others in any order, either all together or one Key at a time. This Introduction provides a summary of important information that you will find very helpful. After the introduction section, each section will follow the same format:

1. **Handout:** Each key begins with a two-page handout. The first page introduces the key, summarizes why the key is important, and explains the disease or condition. The second page describes actions that can be taken to improve or lower risk. You are strongly encouraged to share these handouts with other people. Handouts for each key are also available online at http://www12.edc.gsph.pitt.edu/CHA_OAEP/.

2. **More Information About:** This section provides additional information that will help you be more informed and knowledgeable about each key. Some keys do not have this section.

3. **Sharing the Wealth on Health:** This section provides suggestions and examples of ways that you can share the “10 Keys”™ messages with others.

4. **Personal Goals and Action Steps:** This worksheet gives you a chance to record your goals and action steps. This process will help you to commit to a specific plan of action.

5. **Activities:** These assignments can be done in class or at home. They will provide you with the opportunity to practice your new skills.

6. **Frequently Asked Questions:** This section summarizes questions and answers that provide more detail than the overview of the key.
The older adult population in the US is growing rapidly and is expected to double over the next 30 years. This increase is occurring in both the 65 and older age group as well as in the 85 and older age group. The aging of America is influencing all age groups in almost all areas of life. Past images of frailty and dependence are being replaced with ones of vitality, strength, wisdom, and independence. Healthy adults are likely to work, volunteer, and travel, and they are interested in their health and that of future generations. Keeping adults healthy as they age by focusing on the “10 Keys”™ to Healthy Aging provides an opportunity for the CAPH-PRC to take prevention into the community.

The CAPH-PRC was established in Allegheny County, Pennsylvania, an area that has the second largest population of older adults in the country. One important challenge for the Center is to respond to the needs of the aging adult community with creative approaches topreventionthat promote healthy aging. The CAPH-PRC has responded to this challenge with the “10 Keys”™ to Healthy Aging program. The program helps adults remain independent, functional, and contributing members of our society as they age.
Gerontology, the science of aging, is important to the understanding of diseases and conditions common to adults as they age. At the University of Pittsburgh, and at other centers across the country, many researchers are interested in healthy aging. They have conducted numerous studies over many years to learn about the major health conditions that lead to poor health and to determine what can be done to prevent these conditions from occurring.

The great news is that improvements in health are possible at any age. This research provided the groundwork that identified ten key health areas and risk factors that could be targeted to lead to big health payoffs for adults as they age. These “10 Keys”™ to Healthy Aging form the basis for a community-wide health promotion effort that focuses on the health and well being of the whole person. This is important because many healthy adults age with more than one medical condition. A holistic approach to health provides a broad range of outreach opportunities for individuals and communities to become involved.
Successful aging has been defined as freedom from cardiovascular disease, cancer, and respiratory problems. It has also been defined as maintaining physical and cognitive function through control of disease risk factors. The “10 Keys”™ to Healthy Aging were identified with this in mind to target the causes of disease and disability that could be greatly reduced, postponed, or eliminated to promote successful and healthy aging in functional older adults.

An ideal health program includes all “10 Keys”™ and strives to empower individuals in the community to become actively involved in promoting their own health.
The “10 Keys”™ to Healthy Aging program uses risk factor assessment as a simple and useful tool to help individuals learn about their overall health.

The Prevention In Practice (PIP) report is designed to involve adults in learning about their personal risk factors and identifying keys that require action. The PIP report includes the five columns described below. Actions or steps (Column 5) that are necessary to improve or lower risk factors are reviewed in the various chapters in this guide.

<table>
<thead>
<tr>
<th>No Key</th>
<th>“10 Keys”™ to Healthy Aging</th>
<th>CAPH-PRC Goals</th>
<th>How to talk to your doctor about your health</th>
<th>If action required check box</th>
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<tr>
<td>(1)</td>
<td></td>
<td>(3)</td>
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<td>(5)</td>
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Which key is addressed first or what plan of action is initiated is a personal decision. The important point is that an action plan is developed. As a participant in the “10 Keys”™ program, you will have the opportunity to assess your own “10 Keys”™ areas. A complete PIP Report is on the next page. You may consider making a copy of the PIP Report to take home and share with your health care provider to discuss your specific goals.
### Prevention In Practice (PIP) Report- Guidelines for Adults Age 50 and Over

#### “10 Keys”™ to Healthy Aging

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
<th>Action</th>
<th>Health Check</th>
<th>Action Required</th>
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</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Lower Systolic Blood Pressure</td>
<td>Under 140 mmHg (Best under 120 mmHg)</td>
<td>Know your number; check &amp; record regularly</td>
<td>What is my blood pressure reading? I need help to lower my blood pressure.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Stop Smoking</td>
<td>No Tobacco Use</td>
<td></td>
<td>I need help to stop smoking.</td>
</tr>
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<td><strong>3</strong></td>
<td>Participate In Cancer Screening</td>
<td>Prostate (men)</td>
<td>Prostate Specific Antigen (PSA) (In consultation with your physician)</td>
<td>I am concerned about prostate cancer. Should I have a PSA test?</td>
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<tr>
<td></td>
<td>Breast (women)</td>
<td>Mammogram (test every 2 years)</td>
<td></td>
<td>I need a prescription for my mammogram.</td>
</tr>
<tr>
<td></td>
<td>Cervical (women)</td>
<td>Pap test &amp; pelvic exam (test every 1 – 5 years)</td>
<td></td>
<td>I need a Pap test and pelvic exam.</td>
</tr>
<tr>
<td></td>
<td>Colon</td>
<td>Colonoscopy (test every 10 years)</td>
<td></td>
<td>I am concerned about colon cancer. I need a prescription for a colonoscopy.</td>
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<tr>
<td><strong>4</strong></td>
<td>Get Immunized Regularly</td>
<td>Flu shot (yearly), Pneumonia Vaccine (one lifetime shot)</td>
<td></td>
<td>I need a flu shot. Have I ever received a pneumonia shot?</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>Regulate Blood Glucose</td>
<td>Under 100 mg/dl fasting</td>
<td>Know your number, take action if necessary</td>
<td>Do I have diabetes? Help me to get my blood glucose &lt;100 mg/dl.</td>
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<tr>
<td><strong>6</strong></td>
<td>Lower LDL Cholesterol</td>
<td>Under 100 mg/dl</td>
<td>Know your number, take action if necessary</td>
<td>What is my LDL cholesterol level? I need help getting my LDL &lt;100 mg/dl.</td>
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<td><strong>7</strong></td>
<td>Be Physically Active</td>
<td>Moderate activity at least two and a half hours per week</td>
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<td>I am having difficulty being active because:</td>
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<td><strong>8</strong></td>
<td>Maintain Healthy Bones, Joints &amp; Muscles</td>
<td>Get a bone density test (women); follow up if needed. Avoid injury Maintain a healthy weight</td>
<td></td>
<td>I am concerned about my height loss. Should I have a bone density test? I am concerned about falling. I am concerned about my weight.</td>
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<tr>
<td><strong>9</strong></td>
<td>Maintain Social Contact</td>
<td>Participate in conversation or activities with others at least once a week</td>
<td></td>
<td>I don’t interact with anyone.</td>
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<td><strong>10</strong></td>
<td>Combat Depression</td>
<td>Maintain good mental health</td>
<td></td>
<td>I feel sad most of the time. Can we discuss treatment options?</td>
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Healthy Aging and Prevention Websites

Center for Aging and Population Health - Prevention Research Center
http://www.caph.pitt.edu

Alzheimer’s Association
http://www.alz.org

American Association of Retired Persons
http://www.aarp.org/health

American Cancer Society
http://www.cancer.org

American College of Sports Medicine
http://www.acsm.org

American Diabetes Association
http://www.diabetes.org

American Dietetic Association
http://www.eatright.org

American Heart Association
http://www.heart.org

Centers for Disease Control and Prevention
http://www.cdc.gov/aging

National Arthritis Foundation
http://www.arthritis.org

National Institutes of Health
http://www.nih.gov

National Institute on Aging
https://www.nia.nih.gov/

United States Department of Health and Human Services
http://www.hhs.gov/aging#

University of Pittsburgh Medical Center Patient Education Materials
http://www.upmc.com/patients-visitors/education/Pages/default.aspx
# Key #1
Lower Systolic Blood Pressure

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Source: ©Microsoft Office Online, Clip Art, Expressions
Lower Systolic Blood Pressure

Goal: Lower systolic blood pressure

What is Blood Pressure?

Blood pressure is defined as the force with which blood pumps through the body. High blood pressure, also known as hypertension, places an extra burden on your heart and blood vessels.

120
Systolic pressure (pressure when the heart is pumping) in mmHg

80
Diastolic pressure (pressure when the heart is resting) in mmHg

More than 70% of adults age 60 and over suffer from high blood pressure, making it a very common condition. National Center for Health Statistics, Trends in Healthy Americans. Health, United States, 2006

Controlling systolic blood pressure is important as we age. The best blood pressure is the level at which your risk is lowest. Lower systolic blood pressure to a healthy range determined by your physician.

Hypertension is an important risk factor for:
- Heart Attack
- Stroke
- Age-Related Dementia
- Memory Loss
- Kidney Failure
- Congestive Heart Failure

Modifiable Risk Factors for High Blood Pressure
- Obesity
- High-Sodium Diet
- Inactivity
- Tobacco Use
- Drinking Alcohol

Non-Modifiable Risk Factors
- Race
- Age
- Heredity

High blood pressure is a serious condition requiring lifelong treatment. It is possible to lower blood pressure with lifestyle changes and medication.
Take Action

You can lower your blood pressure!

Step 1: Know and record your numbers

Monitor your blood pressure over time and record your numbers on a wallet card or personal health record. Work with your physician to determine your individual blood pressure goal.

Step 2: Discuss your blood pressure with your doctor

Be Prepared: Know your numbers and always take your records with you to your appointments.

Ask Questions: Ask the doctor to explain your numbers and give you specific recommendations for lifestyle changes and medications, if needed.

Share Your Point of View: Discuss your concerns and plan of lifestyle changes with your doctor.

Step 3: Modify your lifestyle

Maintain a Healthy Weight: If overweight, set a weight loss goal.

Be Physically Active: Engage in at least 30 minutes of physical activity most days of the week.

Follow a Heart Healthy Eating Plan: Limit saturated fat, consume five or more fruits and vegetables per day, and choose low-fat or fat-free dairy products.

Reduce Sodium in Your Diet: Choose fewer processed foods and read labels in order to purchase foods with less than 120 mg sodium serving, for a total of less than 1500 mg a day.

Drink Alcohol in Moderation: If you drink alcoholic beverages, limit to one drink a day for women or two drinks a day for men.

Stop Smoking or Using Tobacco

Manage the Stress in Your Life

Step 4: If medication is prescribed, take it as directed

For the best blood pressure control, combine lifestyle habits and medications. Many individuals will require several different medications to lower blood pressure. Most have few side effects and a number of them are low cost.
More Information About Blood Pressure

Inform

Blood pressure is measured in millimeters of mercury (mmHg). This is a standard unit of pressure just as an inch is a standard unit of distance.

Systolic Blood Pressure Levels

120 mmHg
Normal

Pre-Hypertension

140 mmHg
Hypertension

Motivate

High Blood Pressure (HBP) is a risk factor for many diseases

HBP

Hardened or damaged arteries

Damage vessels in kidneys

Decreased blood flow to heart/body

Less fluid filtered by kidneys

Build-up of wastes in body

Stoke

Chest pain or damage to the heart

Kidney Disease or Failure

Congestive Heart Failure

Heart Attack

Chest pain or damage to the heart
Be Informed

More Information About Blood Pressure

Encourage Action

Monitor your blood pressure between physician visits
Take advantage of free blood pressure screenings that are offered by health care facilities, pharmacies, gyms, or local community centers. If your blood pressure is high, ask your doctor about getting a home monitor.

Talk to your doctor
- Write down your questions before your visit and take them with you.
- Ask your doctor to review your personal risk factors.
- Review your blood pressure records.
- Discuss lifestyle changes that may help improve or maintain your blood pressure.
- Understand that medications may be needed.
- Ask about your current medications:
  - What side effects should I be aware of?
  - Is there a less expensive alternative?
- Ask about any physical activity and dietary recommendations or limitations.

Take your medication as prescribed
Taking your medications as prescribed can prevent a heart attack, stroke, and congestive heart failure. These are serious conditions in which blood flow is blocked. Make taking your medicine part of your daily routine so you don’t forget.

- Take medications at the same time every day (coordinate with meals or other daily events)
- Use a pill box to organize and remind you
- Use a calendar to cross off doses after they are taken
- Leave notes out to remind yourself
- Ask family and friends to remind you
- Make sure you keep a daily dose with you when you travel or make a day trip
- Call your pharmacy for a refill before you run out of medicine, or sign up for automatic refills
- Keep pills in an obvious place that you see every day—like on your nightstand or on the kitchen table

Source: ©Microsoft Office Online, Clip Art, Pills
More Information About Blood Pressure

Encourage Action

**Modify Your Lifestyle:** Lifestyle changes are important even if medications are prescribed.

**Maintain a Healthy Weight**
Maintain a healthy body weight. Losing just 10 pounds, if you are overweight, can lower your blood pressure.

**Be Physically Active**
At least 30 minutes of physical activity on most days of the week can help you prevent or control high blood pressure.

**Reduce Sodium in Your Diet**
- Most sodium comes from salt added during processing.
- Taste food before salting. As you use less salt, foods will begin to taste salty. Over time you will prefer foods with less salt.
- Buy fresh, frozen, or canned “with no salt added” vegetables.
- Use herbs, spices, and salt-free seasoning blends in cooking and at the table.
- “Convenience” foods are often high in sodium and fat. Read labels and choose the brands with lower sodium and fat. Cut back on frozen dinners, pizza, packaged mixes, canned soups, and salad dressings since these can be high in salt.
- Rinse canned foods, such as tuna or vegetables, to remove some sodium.

**Drink Alcohol in Moderation**
In addition to raising blood pressure, alcohol adds calories to your diet that can prevent weight loss. Limit to up to 1 drink a day for women, up to 2 drinks for men.

**Stop Smoking or Using Tobacco**
Smoking raises your blood pressure and can cause scarring in the blood vessels, which further limits blood flow. Additives in smokeless tobacco will also cause your blood vessels to narrow, raising your blood pressure.

**Manage the Stress in Your Life**
Stress is not a proven risk factor for hypertension, but stressful situations can cause a temporary increase in blood pressure. Managing your stress level is important for your overall wellness.
**Tips for Promoting Healthy Blood Pressure**

- When asked to bring a food item to an event or potluck, bring fresh fruit or vegetables, unsalted pretzels, or a healthy, homemade lower-sodium dish. Encourage others to do the same.

- When you speak with friends who are considering increasing their daily activity level, encourage them to make small changes, such as parking farther from their destination. Small changes can lead to big improvements.

- Try to share what you’ve learned with community leaders who can help you get your message out.

- Encourage others to take their blood pressure monitors to their doctors for calibration. Calibration keeps the blood pressure monitor readings correct.

---

### Ideas for Promoting Healthy Blood Pressure

- 
- 
- 
- 

Source: ©Microsoft Office Online, Clip Art, Blood Pressure
Systolic Blood Pressure

Personal Goals & Action Steps

My Current Blood Pressure: ____________________________

My Personal Blood Pressure Goals: ______________________

----------------------------------------------------------

----------------------------------------------------------

----------------------------------------------------------

----------------------------------------------------------

Steps Toward Attaining My Goals

1. _____________________________________
2. _____________________________________
3. _____________________________________
4. _____________________________________
5. _____________________________________
Systolic Blood Pressure

Take-Home Assignment #1

Find a place in your community where you can get your blood pressure checked. This may be an automated machine at a pharmacy or a free service at a clinic. Go to this place and have your blood pressure taken. Write down your blood pressure on your wallet card.

How was your experience? What suggestions do you have for others?

________________________________________________________________

________________________________________________________________

________________________________________________________________

Talk to a friend or family member about blood pressure. Ask them if they know their blood pressure number. Write out what you want to say before you meet. Use the blood pressure handout as a reference.

“I am taking a class on healthy aging. May I talk to you about blood pressure and its risk factors?”

________________________________________________________________

________________________________________________________________

________________________________________________________________

How did the conversation go? What would you do differently next time?

________________________________________________________________

________________________________________________________________

________________________________________________________________
Take-Home Assignment #2

Systolic Blood Pressure

Look through your kitchen cupboards and pull out four different foods that you eat during a typical week. List these foods and their sodium content on the chart below. Take this page with you to the grocery store.

The next time you go grocery shopping, pick a day when you will have time to read and compare food labels. Purchase food items that are similar to the ones you have at home, but that have less sodium. List their sodium content once you get home. Compare them to the ones in your cupboard. How much sodium did you cut out by using the low sodium option? Remember that you should have less than 1500 mg of sodium per day.

<table>
<thead>
<tr>
<th>Type of food from your kitchen</th>
<th>Sodium in kitchen foods</th>
<th>Sodium in low salt food</th>
<th>Sodium cut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Canned Peas</td>
<td>380 mg</td>
<td>125 mg</td>
<td>255 mg</td>
</tr>
<tr>
<td>Cereal:</td>
<td>mg</td>
<td>mg</td>
<td>mg</td>
</tr>
<tr>
<td>Salad Dressing:</td>
<td>mg</td>
<td>mg</td>
<td>mg</td>
</tr>
<tr>
<td>Canned Soup:</td>
<td>mg</td>
<td>mg</td>
<td>mg</td>
</tr>
<tr>
<td>Frozen Dinner:</td>
<td>mg</td>
<td>mg</td>
<td>mg</td>
</tr>
</tbody>
</table>

Use your lower-sodium foods to prepare a favorite food or recipe. Invite some friends and family over to sample your lower-sodium creations. If you don’t tell them it’s lower sodium, they will never know!

This dinner party is a good opportunity to discuss with your guests the importance of reducing sodium intake. The meal you have prepared will serve as a great example of how easy and enjoyable lower sodium choices can be.

Source: ©Microsoft Office Online, Clip Art, Soup
Frequently Asked Questions

Can my systolic blood pressure be too low?
Yes, if your systolic (top) blood pressure is consistently below 90 mmHg and is causing problems such as fainting or dizziness, you should contact your doctor. There are many reasons for “low” blood pressure and your doctor will investigate the cause.

How does sodium affect blood pressure?
Eating too much sodium causes the body to retain fluid. This extra fluid places added pressure on the arteries, which causes your blood pressure to rise. Most Americans eat more than double the recommended level of sodium.

How does physical activity help lower my blood pressure?
Regular physical activity helps to maintain a healthy weight, and makes your heart stronger. A strong heart can pump blood with less effort, which in turn is less pressure on your arteries.

Why does blood pressure increase with age?
As people age, their blood vessels become less elastic. This causes the heart to work harder, which in turn increases blood pressure. This manner of aging is common, but it is not inevitable. In many people, it can be prevented through healthy lifestyle choices.

Why do I have to keep taking my blood pressure medication if my blood pressure is normal again?
Your blood pressure is in the “normal” range because the medication is working to control it. Keep taking your pills to keep your blood pressure controlled. Do not change your medication without talking to your doctor.

The questions I still have about blood pressure are:  ___________  ___________  ___________  ___________

______________  ______________

______________  ______________

______________  ______________
# Key #2

## Stop Smoking

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
</tr>
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<tbody>
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<td>2.10</td>
</tr>
<tr>
<td>Frequently Asked Questions</td>
<td>2.12</td>
</tr>
</tbody>
</table>

Source: ©Microsoft Office Online, Clip Art, Grandfather
It's Not Too Late to Benefit from Quitting!

Are you thinking to yourself, “The damage has been done. Why quit now?” Even after forty or fifty years of smoking, the body can still repair much of the damage from smoking. Studies show benefits to quitting at any age. You don’t have to wait years and years for benefits to begin. Many benefits are noticed in the first year—or even the first month—after quitting.
Take Action

You can stop smoking!

START Your Tobacco-Free Life Today

Try the START Program developed in collaboration with the Centers for Disease Control and Prevention, National Institutes of Health, National Cancer Institute, Department of Health and Human Services, and USA.gov.

Set a quit date

Tell family, friends and co-workers that you plan to quit

Anticipate and plan for the challenges

Remove tobacco products from your home, car, and work

Talk to your doctor about getting help to quit

For more information or support:
Call 1-800-QUIT-NOW
or visit www.smokefree.gov

Centers for Disease Control and Prevention:
http://www.cdc.gov/tobacco/quit_smoking/how_to_quit/index.htm
Inform and Motivate

Nicotine is a very addictive drug found in tobacco products. People usually try several times to stop using tobacco before they quit successfully. Each time a person tries to quit, he or she learns something about what works and what situations are problematic. By using proven cessation treatments, such as FDA-approved medications and individual, group, or phone counseling, you can improve your chances for success.

Smoking and tobacco use are risk factors for many diseases. Smoking can cause:

- Coronary heart disease
- Cancer
- Lung diseases
- Decreased bone density
- Emphysema
- Stroke
- Throat and mouth disease
- Bronchitis
- Hypertension
- Impotence

Most of these conditions will improve, or at least not worsen, after you quit.

Encourage Action

The U.S. Public Health Service’s Clinical Practice Guidelines (Fiore, et al., 2000) recommends the use of the “5 A’s” to help a smoker quit smoking.

1. **ASK** - Do you smoke or use tobacco?

2. **ADVISE** - Strongly urge tobacco users to quit.

3. **ASSESS** - Determine willingness to make a quit attempt.

4. **ASSIST** - Aid the person in quitting.

5. **ARRANGE** - Set up a follow-up meeting to encourage action.

Source: ©Microsoft Office Online, Clip Art, Holding Hands
Inform Medications Can Sometimes Help You Quit Smoking

To help with nicotine withdrawal, nicotine replacement therapy (NRT) is often used. Medications such as nicotine gum, patches, and lozenges may help reduce your urge to smoke. Check with your doctor about these medications. He/She would be able to help determine what is best for you.

Withdrawal Symptoms

If you quit smoking, you may experience some of the following symptoms:

- Anger
- Depression
- Headache/Dizziness
- Increased Appetite
- Cravings
- Nausea
- Irritability
- Sleeplessness
- Fatigue
- Trouble Focusing
- Weight Gain

Some withdrawal symptoms will come and go over a period of a few days. Most are gone within 3 weeks and do not affect everyone to the same degree. Weight gain is a common concern but it is not as harmful as smoking. Most people gain less than 10 pounds.

Control your weight as you quit smoking:
http://www.heart.org/HEARTORG/HealthyLiving/QuitSmoking/Urges/How-Can-I-Avoid-Weight-Gain-When-I-Stop-Smoking_UCM_307852_Article.jsp#.VtYWd7fSm70

Source: ©Microsoft Office Online, Clip Art, Headache
WHAT HAPPENS WHEN YOU QUIT SMOKING

After 20 Minutes
Your heart rate drops to a healthier level.

After 12 hours
The carbon monoxide level in your blood drops to normal.

After 15 Years
Your risk of coronary heart disease is back to that of a nonsmoker’s.

After 10 Years
Your lung cancer death rate is about half that of a smoker’s. Your risk of cancers of the mouth, throat, esophagus, bladder, kidney, and pancreas decreases.

After 5 Years
Your stroke risk is reduced to that of a nonsmoker’s 5-15 years after quitting.

After 1 Year
Your added risk of coronary heart disease is half that of a smoker’s.

Source: Centers for Disease Control
Be Informed

More Information About Quitting

<table>
<thead>
<tr>
<th>Smoking Triggers</th>
<th>Ways to Handle Triggers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>Remember your reasons for quitting</td>
</tr>
<tr>
<td>Watching TV</td>
<td>Have a stick of gum, piece of hard candy, or a drink of water instead!</td>
</tr>
<tr>
<td>Driving</td>
<td>Physical activity increases your energy, helping you fight cravings</td>
</tr>
<tr>
<td>Drinking alcohol</td>
<td>Take a few deep breaths</td>
</tr>
<tr>
<td>Taking a work break</td>
<td>Call someone you trust to distract you</td>
</tr>
<tr>
<td>Seeing someone else smoke</td>
<td>Find a smoke-free public place (like a movie theater or store) to spend your time</td>
</tr>
<tr>
<td>Feeling lonely</td>
<td>Read a magazine, listen to music, or play a game to take your mind off smoking</td>
</tr>
</tbody>
</table>

General Hints for Helping Loved Ones Quit

⇒ **Respect** that it is your loved one’s decision to quit and they are ultimately in charge of the successes and challenges that accompany it.

⇒ **Spend time** with the quitter participating in activities to keep smoking off their mind and to help them avoid cravings.

⇒ **Celebrate** along the way. Quitting smoking is very exciting!

⇒ **Be positive.** Judgment, scolding, and teasing will not make the smoker feel any better about him/herself while quitting.

⇒ **Understand** that the quitter’s grumpiness is due to nicotine withdrawal and it shouldn’t be taken personally. Remind them that the symptoms will go away in about two weeks.

Sources: Centers for Disease Control and American Cancer Society

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Center for Aging and Population Health - Prevention Research Center
Stop Smoking

Sharing the Wealth on Health

Tips for Promoting Smoking Cessation

- Take time to learn about quitting so you know firsthand what smokers experience.

- Help friends who smoke find a “quit buddy.”

- Set a positive example by not allowing smoking in your house, yard, or car. You can do this by posting “No Smoking” signs or by removing ashtrays and lighters.

- Carry small index cards with the names and phone numbers or web sites of local smoking cessation programs that you find most helpful (from the activity on page 2.11) in your wallet or purse.

- Reward and encourage your smoking friends and family members when they attempt to quit. Encourage them to celebrate smoke-free days, weeks, and months.

Ideas for Promoting Smoking Cessation

[Blank lines for ideas]

Source: ©Microsoft Office Online, Clip Art, Cigarette
My Goals For A Smoke-Free World (for me, my loved ones or my community):

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Steps Toward Attaining My Goals

1. _______________________________ _______________________________

2. _______________________________ _______________________________

3. _______________________________ _______________________________

4. _______________________________ _______________________________

Source: ©Microsoft Office Online, Clip Art, Cigar
Stop Smoking

Take-Home Assignment #1

Identify a smoker whom you feel comfortable talking to about their smoking habit. Find out how willing he/she is to quit smoking. This information will help you decide the best way to help. Ask the person:

**On a scale of 1-10, how ready are you to quit?**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

I’m not ready          I’m thinking about it...          I’m ready to try to quit

Depending where the person is on the scale, try using the reply statements listed below.

- **“Not ready” stage:** These smokers don’t like to talk or think about quitting. They will often benefit from printed information. About 40% of smokers are in this category.
  
  Your Reply: “I understand that you aren’t ready to stop smoking. Would you please consider reading this information?”

- **“I’m thinking about it” stage:** These smokers are preparing to change their behavior. About 40% of smokers are in this category.
  
  Your reply: “I hear you saying that you want to quit smoking but don’t know where to start. Can I give you some information about a few local resources?”

- **“I am ready to try to quit” stage:** These smokers are ready for action or are already trying to quit. About 20% of smokers are in this category.
  
  Your reply: “You should be proud that you are taking control of your health. Can I give you more information on smoking and some tips on how to quit? How else can I help?”
This chapter has presented some of the basic information about tobacco and the quitting process. However, there is a great deal of information available from other sources. There are also many community agencies that offer smoking cessation services.

Information on quit programs can be important to your efforts to help friends and family members who are ready to quit smoking.

Check out your local hospital, clinic, or medical center to see what services and information they offer.

Government agencies such as the Department of Health and Human Services sometimes offer smoking cessation programs through local departments of health. There are also many resources on the internet or at the library that provide information and services for smokers who want to quit.

Visit or contact some of these resources and see what you can find. Write down three local resources that offer cessation programs and comment on which were most helpful. Be sure to call the telephone numbers you find to make sure they are still in service. Once you have gained some familiarity with the services that are offered by your local community agencies, you can direct interested smokers to these resources.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Telephone # or Web site</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
How does smoking cause heart disease and stroke?
Carbon monoxide, a toxin in cigarettes, damages the lining in arteries and allows cholesterol to build up in blood vessels, leading to reduced blood flow. This is made worse by nicotine, another toxin in cigarettes, which causes a ‘fight or flight’ response when you smoke. Nicotine makes blood vessels constrict (narrow) and at the same time, increases blood pressure. Over time, the arteries harden and become so clogged that blood flow is severely reduced. (Source: WhyQuit.com @ http://whyquit.com/whyquit/linksjblood.html)

What does COPD stand for and how does smoking cause it?
Chronic Obstructive Pulmonary Disease. Smoking damages the airways and alveoli (air sacs) of the lungs so that they don’t work as well.

Why does smoking cause bone problems in women?
Smoking reduces bone density in post-menopausal women and causes bones to be more porous or fragile.

How does smoking cause cancer?
The toxins found in cigarettes will cause damage to the cells in your body. These cells either grow abnormally and/or rapidly.

Why do people keep smoking when they know that it is so bad?
Smoking is an addiction. The nicotine in tobacco is the addictive ingredient. The CDC reports that 25% of adults in the United States smoke and 70% of smokers would like to quit. People who understand that nicotine addiction is a disease and seek the help of their physician are most successful at quitting.

The questions I still have about smoking are: ____________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
## Key #3
### Participate in Cancer Screening

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
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<tbody>
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<td>3.4</td>
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<td>3.5</td>
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<tr>
<td>Personal Goals and Action Steps</td>
<td>3.6</td>
</tr>
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<td>Take-Home Assignments</td>
<td>3.7</td>
</tr>
<tr>
<td>Frequently Asked Questions</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Source: ©Microsoft Office Online, Clip Art, Families
Key #3

Participate in Cancer Screening

What is Cancer?

The National Cancer Institute defines cancer as “A term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems.”

Take Steps Now to Prevent Cancer

- Schedule an appointment with your doctor to get the prescriptions and referrals you need for cancer screenings.
- Overcome your fear of uncomfortable screenings or your worries about the results by reminding yourself that the earlier cancer is found, the more likely that it can be treated successfully.
- Do not use tobacco products.
- Be physically active—at least 30 minutes a day, most days of the week.
- Choose foods with less animal fat and more fiber.
- Use sunscreen and avoid tanning booths.
- Drink less alcohol—no more than 1 drink a day for women and no more than 2 a day for men.
- Protect yourself from sexually transmitted diseases because they are linked to certain cancers.
- Know your family history—family members can have some risk factors for cancer in common or share an abnormal gene that causes cancer.

Source: ©Microsoft Office Online, Clip Art, Cancer

Source: ©Microsoft Office Online, Clip Art, Doctor
Inform

It is important to know some of the symptoms of different types of cancer. For example, the American Cancer Society lists the following common cancer signs:

- Change in bowel or bladder habits
- A sore that does not heal
- Unusual bleeding or discharge
- Thickening or a lump in any part of the body
- Indigestion or difficulty swallowing
- Obvious, recent change in a wart or a mole
- Nagging cough or hoarseness
- White patches inside the mouth or white spots on the tongue

These symptoms could suggest cancer but are not diagnostic. Bring such signs to your doctor’s attention for further evaluation.

Source: ©Microsoft Office Online, Clip Art, Senior Citizens

## Early Detection Can Save Your Life!

Screenings may involve a physical exam, lab tests, or other procedures. **You should always discuss your personal risks for cancer and your need for screenings with your doctor.** Medicare now covers many screening tests. If you feel you are unable to pay for screenings that you need, contact your hospital or a local free clinic to find out about assistance programs.

<table>
<thead>
<tr>
<th>Site</th>
<th>Recommendation</th>
</tr>
</thead>
</table>
| Colon & Rectum| At the age of 50, request a prescription to see a gastroenterologist and begin screening using one of the following exam schedules:  
- A fecal occult blood test (FOBT) or fecal immunochemical test (FIT) yearly and a flexible sigmoidoscopy every 5 years  
- A colonoscopy every 10 years  
If you have an immediate relative diagnosed with colon cancer before age 60 (or two relatives diagnosed at any age), then you should receive a colonoscopy every 5 years beginning at age 40 (or 10 years before the age at which the youngest relative was diagnosed). If you are over 75, you may want to ask your doctor whether a colonoscopy is necessary. |
| Breast (Women)| The United States Preventive Services Task Force (USPSTF) recommends mammograms every two years for women aged 50-74. Some guidelines recommend alternate screening strategies. Discuss with your doctor to decide what is best for you.  
To receive a mammogram, request a prescription from your doctor. Speak to your doctor about regular exams/tests if you have had breast cancer and/or a family history of breast cancer. A clinical breast exam should be part of your annual health exam. If you are 75 or over, you may want to ask your doctor whether stopping mammograms is appropriate. |
| Uterus & Cervix (Women)| Screenings for cervical cancer (PAP test) should be done every 1-5 years, depending upon your history of abnormal PAP tests and certain risk factors, such as HIV or a weak immune system. If you are 65 or over, you may want to ask your doctors whether stopping cervical exams is appropriate. After menopause, you should ask your doctor about risks for endometrial cancer and report any bleeding or spotting. |
| Prostate (Men)  | Discuss your prostate cancer risks with your doctor. |
More Information About Cancer Screening

Cancer-Related Words That Your Doctor May Use

**Antigen**: Stimulates an immune response in the body

**Benign**: Not cancerous

**Colonoscopy**: A physician inserts a tube with a camera at the end through the rectum. The physician is able to look at the lining of the entire colon for abnormalities.

**DRE**: Digital rectal exam (finger exam of rectum by doctor)

**Environmental Factors**: Tobacco use, unhealthy diet, lack of physical activity, infectious disease, radiation, & chemicals which can all contribute to cancer

**Fecal Occult Blood Test**: Detects blood in the stool which can be a sign of colon cancer, hemorrhoids, or other health problems.

**Genetic marker**: A DNA sequence that identifies a particular trait or gene

**Hemoccult**: Test for hidden blood in stool

**Malignant**: Cancer is present and has potential to spread

**Polyp**: Abnormal growth of tissue (tumor) that may be benign or malignant

**Prostate**: A walnut-sized gland in men that is located near the urethra. The urethra is the tube that takes the urine from the bladder to the outside of the body.

**PSA**: Prostate specific antigen (blood test for prostate cancer)

**Sigmoidoscopy**: A physician inserts a tube with a camera at the end through the rectum. The physician is able to look for abnormalities in the lining of the lower end of the colon. The doctor cannot view the entire colon with this test.

**Tumor**: A mass of tissue with excessive growth. Can be malignant (cancerous) or benign (not cancerous).
Cancer Screenings

Sharing the Wealth on Health

Tips for Promoting Cancer Screening Participation

- Encourage others to take photographs of body moles. They should keep these photos and discuss any changes with their doctor or a dermatologist.

- Find a screening “buddy.” Get on schedule with a friend to have your regular screenings done. It may be easier to remember to have them done if you do them together. It also serves as good support during potentially unpleasant test preparations or procedures, as well as during times of concern about test results.

- Participate in or support community awareness of events such as Race for the Cure or SET the PACE.

- Help educate people and reduce screening fears by sharing accurate information about screening procedures.

Ideas for Promoting Cancer Screenings
My Personal Cancer Screening and Prevention Goals:

_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________

Steps Toward Attaining My Goals

1. ____________________________________________
   ____________________________________________
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2. ____________________________________________
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3. ____________________________________________
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4. ____________________________________________
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   ____________________________________________

Source: ©Microsoft Office Online, Clip Art, Lamp
Participating in cancer screenings is key to early detection and successful treatment of cancer. Talk to your doctor and review your medical records so that you can fill in the chart below and get a prescription for the screenings you need.

<table>
<thead>
<tr>
<th>Screening Test</th>
<th>Frequency</th>
<th>Date of Last Test</th>
<th>Scheduled?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Body Exam/Physical</td>
<td>Once per year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Breast Exam (women)</td>
<td>Once per year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mammogram (women)</td>
<td>Every 2 years for women aged 50-74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pap Test (women)</td>
<td>Every 1-5 yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelvic Exam (women)</td>
<td>Once per year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prostate Specific Antigen (men)</td>
<td>As doctor recommends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Exam</td>
<td>Once per year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fecal Occult Blood Test</td>
<td>Once per year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sigmoidoscopy</td>
<td>Every 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>Every 10 yrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The American Cancer Society can provide more information about screenings and results. Contact them by phone at 1-800-ACS-2345, or visit [www.cancer.org](http://www.cancer.org) for information about screening sites in your area, as well as possible free screenings. You can share this information with others interested in cancer screenings.
**What causes breast cancer?**

The exact causes of breast cancer are unknown, but there are risk factors linked to the disease.

**Risk factors you can’t control:**
- Sex: women are at higher risk than men
- Age: risk increases with age
- Genes: some breast cancers are linked to genetic changes
- Family History: having a relative with breast cancer doubles your risk
- Race: Caucasian women are at highest risk

**Lifestyle factors that increase risk, that you can control:**
- Drinking more than one alcoholic drink a day (for women)
- Taking postmenopausal hormone replacement therapy
- Being overweight
- Being physically inactive

**How do hormones play a role in breast cancer?**

The levels of hormones in our bodies are carefully controlled. When the hormone levels are too high, they can make the cells grow and divide uncontrollably. The hormones can also stop the cells from dying when they are damaged. This can lead to cancer.

**Can men get breast cancer?**

Yes, men can be diagnosed with breast cancer. Women are diagnosed with breast cancer more frequently than men.

**What causes cervical cancer?**

HPV (human papilloma virus) is spread through unprotected sexual contact and is considered the most important risk factor for cervical cancer.

**If I had a hysterectomy, do I still need to have a PAP test?**

Gynecological exams are important because the doctor checks the rectum, ovaries, vagina, and uterus. If you have had a total hysterectomy, discuss the need for follow up with your doctor.
If I feel fine, do I still need to have a cancer screening?
Yes. Cancer screening is important because it may detect a problem before you have symptoms. Early detection is key to successful prevention and treatment.

Why does my doctor order a colonoscopy more often than every 10 years?
How often you should get a colonoscopy depends on your family history, whether you’ve had colon polyps, and other risk factors.

I never get undressed for my annual physical exam. How does my doctor check for skin cancer?
The only way to assess skin for skin cancer is to examine every inch of your body. You should examine your skin for abnormalities at least once a month. Your body should be examined by a doctor each year, from head to toe, for skin abnormalities.

If I’ve never had a sunburn, can I still get skin cancer?
Yes. You can get skin cancer whether you’ve had a sunburn or not. Make sure to have your skin checked regularly by a doctor.

If I have dark skin, can I still get skin cancer?
Yes. Even though individuals with darker skin have more natural protection from the sun, they can still get skin cancer. While people with lighter skin are at higher risk for skin cancer.

The questions I still have about cancer screenings are: 

____________________________________________________________
____________________________________________________________
____________________________________________________________
____________________________________________________________
Key #4
Get Immunized Regularly

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handout: Get Immunized Regularly</td>
<td>4.1</td>
</tr>
<tr>
<td>More Information About Immunizations</td>
<td>4.4</td>
</tr>
<tr>
<td>Sharing the Wealth on Health</td>
<td>4.5</td>
</tr>
<tr>
<td>Personal Goals and Action Steps</td>
<td>4.6</td>
</tr>
<tr>
<td>Take-Home Activity</td>
<td>4.7</td>
</tr>
<tr>
<td>Frequently Asked Questions</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Source: ©Microsoft Office Online, Clip Art, Senior Citizens
Key #4 Get Immunized Regularly

In the United States, influenza is responsible for about 36,000 deaths annually, while pneumonia is responsible for about 40,000 deaths. All adults over age 50 are encouraged to be immunized to prevent the flu and pneumonia, along with hepatitis B, measles, mumps, rubella, tetanus, and diphtheria. (http://www.cdc.gov/vaccines)

What is a Vaccine?

A vaccine helps to develop immunity by imitating an infection while not causing illness. This is achieved by using only a segment of an infectious agent, or a weakened or killed infectious agent. The vaccine allows your body’s immune system to develop an immune response without becoming sick.

During the two weeks after you receive your vaccination, your immune system produces antibodies for the infectious agent. Antibodies are designed to attack a specific infectious agent.

If you happen to come in contact with the infectious agent after vaccination, the antibodies will immediately begin attacking it and either you won’t get sick, or your symptoms will be very mild. Because it takes time to produce antibodies, you remain unprotected from the infectious agent for the first two weeks after the vaccination.

Since the influenza virus can mutate and change, a yearly shot is needed so that your body has the right antibodies for the new strain of the virus during each flu season.

What is an “Infectious Agent”?  
An infectious agent is usually a virus or bacterium that causes illness after a person is exposed to it. These agents work by reproducing themselves in our body cells.

What is an “Antibody”?  
It is a molecule produced by the immune system to defend the body against an infectious agent. Vaccines work by triggering the release of antibodies so that the immune system will recognize and fight the infectious agent in the future.
# Key #4 Disease Facts: At A Glance

## Understand the Basics

Below are a few key facts about each of the diseases vaccines are recommended for in this key. More information on these diseases can be found at [http://www.cdc.gov/vaccines/vpd-vac/default.htm](http://www.cdc.gov/vaccines/vpd-vac/default.htm).

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pneumococcal Disease</strong></td>
<td>Pneumococcal disease is a bacterial infection that can result in a variety of illnesses such as pneumonia, ear infections and meningitis. Some of these illnesses can be life threatening.</td>
</tr>
<tr>
<td><strong>Influenza</strong></td>
<td>The flu is a contagious respiratory illness caused by viruses. Older adults, young children and people with health complications are at risk for serious complications from the flu.</td>
</tr>
</tbody>
</table>
| **Tetanus, Diptheria, and Pertussis** | Tetanus (lockjaw) is a serious disease causing painful tightening of muscles.  
Diptheria is a respiratory infection and was a major cause of death prior to the creation of a vaccine.  
Pertussis (whooping cough) is also a very serious respiratory infection spread by coughing and sneezing. |
| **Shingles**                    | Shingles is a painful rash with blisters on one side of the body.  
It is caused by the same virus that causes the chickenpox.  
If you had chickenpox before, you can become infected with shingles later in life because the virus stays dormant in nerve cells.  
If you never had the chickenpox or chickenpox vaccine and are exposed to someone with shingles, you may still become infected with chickenpox. |
| **Hepatitis A**                 | Hepatitis A is a viral liver infection caused by fecal to oral contact.                                                                 |
| **Hepatitis B**                 | Hepatitis B is a liver infection caused by transmission of blood, semen or other body fluids infected with the virus.                  |
| **Measles, Mumps, and Rubella** | Measles is the most deadly childhood rash/fever illness.  
Mumps is a viral disease that causes fever and swelling of the salivary glands among other symptoms. There currently is no specific treatment for mumps.  
Rubella (German Measles) is a viral infection causing rash and fever. |
Proper Immunizations are Essential to Healthy Aging

Below are some of the recommended immunizations for adults over 50. You should always discuss your risks for disease and your need for immunizations with your doctor.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumococcal (pneumonia)</td>
<td>• Two total doses for all adults over the age of 65 and all adults aged 19-64 with a condition that may weaken the immune system. Your doctor will help you to determine the type and timing of the vaccine doses.</td>
</tr>
<tr>
<td>Influenza (flu)</td>
<td>• One dose yearly of any type of flu vaccine for all persons aged more than 6 months.</td>
</tr>
</tbody>
</table>
| Tetanus, Diphtheria, Pertussis (Td and Tdap) | • One dose of Tdap if you are age 18 or older.  
  • One dose of Td every ten years for people of all ages.  
  • Tdap includes Td  
  • OK to get Tdap no matter when last Td was received. |
| Herpes Zoster (shingles) or Varicella (chickenpox) | • One dose of Herpes Zoster vaccine after age 60.  
  • Two doses of Varicella vaccine (4-8 weeks apart) after age 50 if you have not had chickenpox or shingles, if you are a healthcare worker, or if you live in an institutional setting. |
| Hepatitis A                           | • Discuss your risk with your healthcare provider.  
  • Requires two doses, 6-12 months apart.                                                      |
| Hepatitis B                           | • Discuss your risk with your healthcare provider.  
  • Requires three doses within a six-month period.                                              |
| Measles, Mumps, Rubella (MMR)         | • One or two doses in a lifetime.  
  • If you have never had the MMR vaccination or are unsure if you have had it, discuss your risk with your doctor. |

Keep a Record

Keeping a personal record of your immunizations is very helpful, not only to yourself, but to your doctor as well. Keep a record so you can schedule your immunizations at appropriate intervals.

http://www.cdc.gov/vaccines/schedules/index.html
Inform and Motivate

Facts About the Pneumococcal (Pneumonia) Vaccine

- Everyone age 65 and over should receive the pneumococcal vaccine.
- Adults under age 65 should get vaccinated if they are at high risk.
- Most people have mild or no side effects from the shot.
- The pneumococcal immunization is covered by Medicare.

Facts About Preventing Influenza (The Flu)

The flu is a contagious respiratory illness caused by a virus. Although it is quite common, the flu can be dangerous, especially to adults over 65 and children younger than five. The influenza vaccine will help prevent this disease, but it is not perfect for preventing all flu strains, especially for older adults. If you have been vaccinated and you do get the flu, it will be a much milder case, with less chance of hospitalization or death.

You can also reduce your risk of getting or spreading the flu by doing the following:

- Wash your hands frequently with soap and water, especially before and after food preparation, after using the bathroom, or when you or someone around you is sick.
- Keep your hands away from your mouth, nose, and eyes.
- When coughing, cover your mouth and nose with a tissue.
- Avoid shaking hands or having close contact with people who are sick.
- Stay home when you are sick to avoid exposing others.

Source: [http://www.cdc.gov/vaccines/schedules/index.html](http://www.cdc.gov/vaccines/schedules/index.html)
Immunizations

Sharing the Wealth on Health

Tips for Promoting Immunizations

- Get a friend to fill out his or her shot record and make your appointments together. Choose a certain day each year that is at the beginning of the flu season to get your flu shots.

- Encourage all the members of your household to get immunized. This will help keep them healthy, which will, in turn, help keep you healthy too.

- Make copies of blank records for friends and family members and encourage them to create their own immunization records.

- Get a local organization to give free immunizations as a community service.

Ideas for Promoting Immunizations in Others

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- 
-
My Personal Immunization Goals: ________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________

Steps Toward Attaining My Goals

1. _______________________________
   _______________________________

2. _______________________________
   _______________________________

3. _______________________________
   _______________________________

4. _______________________________
   _______________________________
Fill out the chart below to make sure that you are up-to-date on all of your vaccinations. If you are not sure when you were last vaccinated, or whether or not you have been immunized, contact your healthcare provider and get that information. If you have not received one or more vaccines, contact your doctor so that you can have them done.

<table>
<thead>
<tr>
<th>Immunizations</th>
<th>How Often Needed</th>
<th>Date of Last Shot</th>
<th>Date of Next Planned Shot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia</td>
<td>Two doses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza (Flu)</td>
<td>Yearly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus/ Diphtheria/ Pertussis (Tdap)</td>
<td>Once</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus/ Diphtheria (Td)</td>
<td>Once every 10 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herpes Zoster (Shingles)</td>
<td>Once</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IF AT RISK**

<table>
<thead>
<tr>
<th>Immunizations</th>
<th>How Often Needed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Varicella (Chickenpox)</td>
<td>Twice, 4-8 weeks apart</td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Twice, 6-12 months apart</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>Three times within a six-month period</td>
<td></td>
</tr>
<tr>
<td>Measles/Mumps/ Rubella (MMR)</td>
<td>Once</td>
<td></td>
</tr>
</tbody>
</table>
**How is the flu virus spread?**
The Centers for Disease Control and Prevention (CDC) indicates that the flu virus is most often spread from person to person. People spread the flu through droplets of moisture from coughing and sneezing. These droplets can travel up to 3 feet in the air and land on the mouth or nose of people nearby. The flu can also spread if someone touches a droplet on another person or object and then touches his or her own mouth or nose.

**How long is someone contagious with the flu?**
The person is contagious 24 hours before they have symptoms of the flu, and up to 5 days after symptoms begin. Being contagious means that the person can spread the flu to others.

**When is the flu season?**
The flu season varies in the United States but is usually during the months of October through May.

**Is it better to get the flu than the flu vaccine?**
No, the flu can be a serious illness especially for older adults and people with some chronic health conditions (like asthma, heart disease and diabetes.) Flu infection puts even healthy adults and children at risk for serious complications including hospitalization and death. “Protecting yourself from flu also protects the people around you who are more vulnerable to serious flu illness.”

**I know people who got the flu shot but still got sick with the flu. Why does this happen?**
Viruses are constantly changing. Scientists regularly adapt vaccines according to changes in the viruses, which is why yearly vaccination is recommended. If you get a flu shot, you may still get the flu but your symptoms won’t be as bad, and the shot may prevent the life-threatening complications of the flu such as dehydration and pneumonia.

Source: ©Microsoft Office Online, Clip Art, Calendar

Centers for Disease Control [http://www.cdc.gov/flu/about/qa/misconceptions.htm](http://www.cdc.gov/flu/about/qa/misconceptions.htm)
**Frequently Asked Questions**

**Immunizations**

Who should NOT receive vaccines?
Some vaccines are not safe for young children, older adults, or people with compromised immune systems. Additionally, any person who has had an allergic reaction from a previous vaccine should not be vaccinated. Talk to your doctor about what vaccines you should receive.

What about the risk of side effects from vaccines?
Most reactions to vaccines are very minor and temporary (such as a sore arm or mild fever). Serious reactions to vaccines are extremely rare and often the risk of disease from not being vaccinated is greater than the risk of a serious reaction to a vaccine. For example, the risk of death from a measles infection is 1 in 500, and the risk of severe reaction to the vaccine for measles is 1 in 1 million.

Centers for Disease Control:  [http://www.cdc.gov/vaccines/](http://www.cdc.gov/vaccines/)

The questions I still have about immunizations are: ___________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
## Key #5
### Regulate Blood Glucose

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handout: Regulate Blood Glucose</td>
<td>5.1</td>
</tr>
<tr>
<td>More Information about Blood Glucose</td>
<td>5.3</td>
</tr>
<tr>
<td>Sharing the Wealth on Health</td>
<td>5.7</td>
</tr>
<tr>
<td>Personal Goals and Action Steps</td>
<td>5.8</td>
</tr>
<tr>
<td>Take-Home Activity</td>
<td>5.9</td>
</tr>
<tr>
<td>Frequently Asked Questions</td>
<td>5.10</td>
</tr>
</tbody>
</table>

*Source: ©Microsoft Office Online, Clip Art, Senior Citizens*
**Key #5**

**Regulate Blood Glucose**

**Goal:** Maintain a fasting blood glucose level below 100 mg/dl.

**Understanding Blood Glucose and Diabetes**

**Type 2 diabetes** is a disease in which the body does not produce enough insulin or properly use insulin, a protein in your body that helps you turn food into energy. This leads to a buildup of glucose (sugar) in the blood and causes damage in the body. For people with diabetes, having high blood pressure and/or high cholesterol increase the risk of dangerous complications.

People can get diabetes at any age. Fortunately, it can be controlled or prevented. Adults age 45 and older should know their blood glucose level and whether or not they have been diagnosed with diabetes.

A simple blood test, called the fasting blood glucose (FBG) test, will tell if your glucose levels are too high. Another test is the glucose tolerance test (GTT), which requires you to drink a sugar solution, followed by a blood test 1-2 hours afterwards.

<table>
<thead>
<tr>
<th>Glucose Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 mg/dl</td>
<td>Normal</td>
</tr>
<tr>
<td>126 mg/dl</td>
<td>Pre-Diabetes</td>
</tr>
<tr>
<td>140 mg/dl</td>
<td>Diabetes</td>
</tr>
<tr>
<td>200 mg/dl</td>
<td></td>
</tr>
</tbody>
</table>

Pre-diabetes is a condition in which blood glucose levels are greater than 100 mg/dl and less than 126 mg/dl. Pre-diabetics are at increased risk for developing type 2 diabetes, heart disease, and stroke. The good news is if you have pre-diabetes, you can reduce your risk of getting diabetes by lowering your blood glucose levels. This requires modest weight loss and an increase in your level of physical activity.

**Diabetes Increases Your Risk for:**

- Heart Disease and Stroke
- Kidney Disease
- Blindness
- Nervous System Disorders
- Dental Disease

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Center for Aging and Population Health - Prevention Research Center

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Rev. 3.21.2016
Take Action  Prevent Type 2 Diabetes

It is possible to delay or prevent the development of type 2 diabetes. Understand your risk and take action to keep your fasting blood glucose less than 100 mg/dl. It is also important to work with a health care provider to maintain your individual blood pressure goal (in people with diabetes, a systolic blood pressure of 140 mmHg is the goal) and your LDL cholesterol less than 100 mg/dl.

Know and Record Your Numbers

If you are 45 or older, you should have a fasting blood glucose test at least every 3 years. A yearly test during your annual physical exam is preferable.

If you are overweight, you should have your blood glucose tested at least once a year, at any age.

If you have any of the symptoms of diabetes that are listed here, you should see your doctor immediately to have your blood glucose level tested.

Modify Your Lifestyle

Pre-diabetes is a serious medical condition. You can prevent the development of type 2 diabetes by changing your diet and increasing your level of physical activity. You may even be able to lower your glucose levels to normal.

Maintain a Healthy Weight: Healthy weight is best defined by the Body Mass Index (BMI), which can be estimated by a table of weight and height. A BMI over 30 is too high for older adults.

Follow a Heart Healthy Eating Plan:
- Choose lean meat, fish, and skinless poultry.
- Choose whole grains over processed grains.
- Use non-fat and low-fat dairy products.
- Enjoy vegetables daily.
- Decrease portion sizes.

Be Physically Active: At least 30 minutes of activity most days of the week.

Drink Alcohol in Moderation: If you drink, limit to 1 drink a day for women or 2 for men.

Stop Smoking or Using Tobacco

Source: ©Microsoft Office Online, Clip Art, Vegetables
**Types of Diabetes**

**Type 1:** This type is often called insulin-dependent diabetes because the pancreas does not have enough insulin for the body's needs. Type 1 diabetes usually affects children and young adults, but does occasionally develop in adults.

**Type 2:** This type usually develops if you are overweight or as you get older. In Type 2 diabetes, the body’s cells do not use insulin properly even though insulin is available. In some cases, the pancreas quits making enough insulin.

**Testing for Diabetes**

**Fasting Blood Glucose:** A blood test that requires you to fast for at least 8 hours. The test determines your glucose level without food.

**Glucose Tolerance Test:** A blood test that requires you to drink a sugar solution 1-2 hours before testing. The test determines your glucose level after calories are consumed.

**Hemoglobin A1C:** A blood test that determines your average glucose level over a period of 2-3 months. Doctors use these results to evaluate the overall glucose control in people with diabetes.

**Risk Factors for Type 2 Diabetes**

- Overweight or Obesity
- Lack of Exercise
- Age
- Race
- Alcohol Abuse
- Family History
- Ever having a baby that weighed over 9 pounds at birth

*Source: ©Microsoft Office Online, Clip Art, Couple*
Inform and Motivate

More Information About Blood Glucose

You eat food

Your stomach and small intestine break food down into glucose, which goes into your bloodstream

Normal

Insulin opens the cell “door.” Glucose is stored in the body cells

Glucose is used for energy

Blood glucose level returns to normal

Type 2 Diabetes

Insulin is not able to open the cell “door.” The glucose cannot get into the cell.

Glucose stays in the blood and is not used for energy

Blood glucose level remains high

Your pancreas releases insulin
Inform and Motivate

Maintain a Healthy Weight:  Healthy weight is best defined by the Body Mass Index (BMI), which can be estimated by a table of weight and height. A BMI over 30 is too high for older adults.

![BMI Table](image)

Source: University of Pittsburgh Center for Aging and Population Health-Prevention Research Center

**Calculate Your Body Mass Index**
Encourage Action

Complications of diabetes can be prevented by:

- Improving your risk factors
- Keeping your systolic blood pressure under 140 mmHg
- Keeping your LDL cholesterol under 100 mg/dl
- Controlling your blood glucose

For People with Diabetes: Optimize your blood glucose by:

- Knowing your A1C goal
- Staying hydrated
- Following regular habits of sleep, exercise, and diet
- Following prescribed treatment
- Eating properly to avoid low blood glucose
- Controlling your blood glucose

Regular Medical Exams

- **Kidneys**: Your annual physical exam should include a urine test for proteins which measures kidney function.

- **Feet**: You should have your doctor check the nerves and pulses in your feet each year. Nerve damage from diabetes can lead to loss of feeling. Take good care of your feet at home by using a nail file instead of scissors.

- **Teeth**: Visit the dentist for a cleaning and exam twice a year. Brush your teeth often and floss regularly to prevent infections in the gums and the bones that hold your teeth in place.

- **Eyes**: Have a comprehensive eye exam every year. In this exam, your doctor puts drops in your eyes to make the pupils bigger (dilated). Finding and treating eye problems early can prevent blindness.

- **Skin**: People with diabetes are more likely to get infections. Make sure you clean any cuts or scrapes well and use antibiotic ointments to kill germs.
Know your numbers (blood glucose and, if diabetic, A1C) and encourage others to know theirs. Many people who have diabetes do not know that they have it.

Tell people about your blood glucose test and how the results have motivated you to change your life. This may give them a better sense of what the test involves and how important it is.

Contact your local hospital or diabetes educator and ask about upcoming diabetes education events and classes. Many hospitals host these events every year. Consider posting these in a community newsletter or arranging carpools.

When hosting a meal or bringing food to an event, make every effort to choose foods that are heart-healthy and that everyone can enjoy. Consider giving people a healthier choice and keeping portions small.

Participate in, or support awareness events like “America’s Walk for Diabetes.”

Source: ©Microsoft Office Online, Clip Art, Cheese
My Current Blood Glucose Level: ________________________

<table>
<thead>
<tr>
<th>Fasting Blood Glucose</th>
<th>100 mg/dl</th>
<th>126 mg/dl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Personal Blood Glucose and Diabetes Prevention Goals:

___________________________________________________

___________________________________________________

___________________________________________________

___________________________________________________

<table>
<thead>
<tr>
<th>Steps Toward Attaining My Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ___________________________</td>
</tr>
<tr>
<td>2. ___________________________</td>
</tr>
<tr>
<td>3. ___________________________</td>
</tr>
<tr>
<td>4. ___________________________</td>
</tr>
<tr>
<td>5. ___________________________</td>
</tr>
</tbody>
</table>
Finding out your fasting blood glucose level is the first step toward diabetes prevention. Contact your doctor and ask for a prescription to have your blood glucose level checked. Your doctor will probably ask you to fast for 8-10 hours before your blood test.

What is the date and time of your appointment?

_________/_________ at ________:____________

After Your Blood Test

*Congratulations for getting your blood glucose checked!*

What was the number? ___________________ mg/dl

If it is **below 100 mg/dl**, great, you are in the healthy range! Have it rechecked in one year, especially if you have any risk factors.

If it is **above 100 mg/dl**, you have pre-diabetes. Talk to your doctor about lifestyle changes that can help prevent the harmful effects of high blood glucose.

*If You Are Diagnosed With Diabetes*, contact your local hospital/health clinic and ask to speak to a diabetes educator. He or she can help you learn about diabetes and control your blood glucose. They can also help you to set goals and problem solve.

What is the telephone number of your local diabetes educator?

(_________) ___________ - ________________

Now that you have taken these steps, you should encourage others to get their blood glucose levels checked. If they are diagnosed with diabetes, then you can provide them with the number of the local diabetes educator so that they can get help as well.
If my blood glucose is high, why don’t I have diabetes?
Your blood glucose may be high, but not high enough to diagnose diabetes. It is possible that you have pre-diabetes. You can prevent developing diabetes by changing your lifestyle (eating healthier and exercising more).

Why is exercise important if I have high blood glucose levels?
Exercise is great for everyone, not just people with high blood glucose. Exercise allows your body to use glucose more efficiently by carrying it from the blood to the muscles so that it can be used for energy.

Why is watching portion size important if I have high blood glucose?
Watching portion sizes helps to regulate your blood glucose because the glucose level in the blood rises according to how much food you eat. If you eat a small food portion, your blood glucose rises less than it would if you eat a larger portion. Eating at least three smaller meals throughout the day helps regulate your blood glucose.

What happens if I am overweight?
Being overweight can lead to diabetes and may cause high blood pressure. Being overweight is a risk factor for diabetes, high blood pressure, and heart disease. Controlling your weight may help control your risk for developing these conditions. A Body Mass Index over 30 (kg/m²) is too high.

What is Hemoglobin A1C (HbA1c or A1c)?
A blood cell lives for 120 days. When the blood glucose level is elevated, the glucose molecules attach to blood cells. The hemoglobin A1C is a blood test that indicates an average blood glucose elevation over an approximate 120-day period.

Source: ©Microsoft Office Online, Clip Art, Scales
**Why do people get diabetes?**
There is no known cause for type 2 diabetes, but there are several risk factors that increase your chance of having it. Being overweight and physically inactive are the biggest risk factors.

**If I have diabetes, does that mean I can never eat sweets?**
Diabetes prevents your body from using the energy (glucose) from all foods, not just sweets. Focus on limiting portion sizes and eating well-balanced meals. Most sweets have many calories and a lot of unhealthy fat, so eat them occasionally and in small amounts.

**If I have diabetes, can I ever lower my blood sugar to “normal”?**
By making healthy lifestyle changes and adhering to prescribed medications, you can lower your blood sugar to below 100 mg/dl, even if you have diabetes.

**What should my Body Mass Index (BMI) be for my age?**
The ideal weight or BMI for adults over 65 is not well established. A BMI over 30 increases risk of diabetes and heart disease, and also for arthritis and disability.

The questions I still have about diabetes and blood glucose are:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Key #6
Lower LDL Cholesterol

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handout: Lower LDL Cholesterol</td>
<td>6.1</td>
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<tr>
<td>More Information About Cholesterol</td>
<td>6.3</td>
</tr>
<tr>
<td>Sharing the Wealth on Health</td>
<td>6.6</td>
</tr>
<tr>
<td>Personal Goals and Action Steps</td>
<td>6.7</td>
</tr>
<tr>
<td>Take-Home Activity</td>
<td>6.8</td>
</tr>
<tr>
<td>Frequently Asked Questions</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Source: ©Microsoft Office Online, Clip Art, Senior Citizens
**Lower LDL Cholesterol**

**Goal:** Maintain an LDL cholesterol level below 100 mg/dl.

**Understanding LDL Cholesterol**

LDL stands for low-density lipoproteins. Lipoproteins are molecules that carry fats around the body. LDL is sometimes referred to as “lousy” or “bad” cholesterol.

A high LDL level places you at increased risk for heart disease and stroke. To know what your LDL cholesterol level is, your doctor will order a lipoprotein profile test on a fasting blood sample. Your doctor will use your LDL level to decide on a treatment plan. LDL can be lowered through diet, exercise and medication.

**LDL Cholesterol Levels**

<table>
<thead>
<tr>
<th>Level</th>
<th>Value (mg/dl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal</td>
<td>100</td>
</tr>
<tr>
<td>Near Optimal</td>
<td>130</td>
</tr>
<tr>
<td>Borderline</td>
<td>160</td>
</tr>
<tr>
<td>High</td>
<td>190</td>
</tr>
<tr>
<td>Very High</td>
<td></td>
</tr>
</tbody>
</table>

**Why Does Cholesterol Matter?**

When there is too much cholesterol (a fat-like substance) in your blood, cholesterol and other substances build up in the walls of your arteries. When arteries become narrowed by this build up, blood flow to the heart is slowed down.

As we age, most individuals have some narrowing of the arteries. This is serious and treatment that includes a medication to lower cholesterol is often prescribed.
Know and Record Your Numbers

You should have a fasting cholesterol profile test as part of your annual physical exam. This test, done after a 9-12 hour fast without food or liquids, provides several important numbers, with LDL being the most important. To get your LDL in the healthiest range, you may need treatment that includes medications in addition to lifestyle changes.

Lifestyle Changes to Help Lower LDL Cholesterol

1. Maintain a Healthy Weight: Being overweight is a risk factor for heart disease and may contribute to high cholesterol. Set a weight goal with your healthcare provider.

2. Be Physically Active: Being physically active reduces a person’s risk of developing heart disease. Regular physical activity can help raise good cholesterol (HDL) levels and lower LDL levels. Engage in at least 30 minutes of physical activity most days of the week.

3. Follow a Healthy Eating Plan: Saturated fat, trans fat, and cholesterol are in many of the foods that we eat. Too much of these in your diet will raise your blood cholesterol levels.
   - Reduce foods with saturated fat and trans fat.
   - Eat 5 or more servings of fruits or vegetables a day.
   - Choose whole grains over processed grains.
   - Choose lower-fat or fat-free dairy products.
   - Choose lean meats, fish, and skinless poultry.
   - Eat 2 servings per week of fatty fish such as mackerel, salmon, and tuna to increase healthy fats.
   - Cut back on snack foods like chips, cookies, and full-fat ice cream.

Medications to Lower LDL Cholesterol

Medications are often necessary to get your LDL cholesterol level below 100 mg/dl. Lifestyle changes to lower cholesterol are still important even when medications are prescribed. These changes can reduce the amount of medication that you need to take. This will keep cost and side effects to a minimum. There are several types of medications available that work well and that are safe. Talk with your healthcare provider to decide which treatments are right for you.
Inform and Motivate

Triglycerides

Triglycerides are a type of fat and are the main storage form of fat in our bodies. All calories (from fats, carbohydrates, and proteins) consumed in excess are converted to triglycerides and stored as fat. A fasting lipid profile test for triglycerides shows the level of triglycerides in your bloodstream. Levels above the optimal range increase your risk for heart disease and stroke. Medications may be required to treat this condition.

Triglyceride Levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Value (mg/dl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal (Best)</td>
<td>150</td>
</tr>
<tr>
<td>Borderline High</td>
<td>200</td>
</tr>
<tr>
<td>High</td>
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<td>Very High</td>
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HDL Cholesterol

HDL stands for high-density lipoprotein. HDL is known as the "good" cholesterol because high levels of it (greater than 60 mg/dl) protect the heart.

HDL cholesterol carries cholesterol back to the liver where it is broken down; this prevents cholesterol from being deposited in the arteries.

Best HDL Level for Men: More than 50 mg/dl
Best HDL Level for Women: More than 60 mg/dl

Source: ©Microsoft Office Online, Clip Art, Exercise
Inform

Eat less saturated fat, trans fat, and dietary cholesterol

Saturated Fat
- Raises LDL cholesterol levels
- Generally solid at room temperature
- Clogs arteries
- Found in whole and 2% milk, butter, cheese, ice cream, red meat, other animal foods, and many snack foods and desserts

Trans Fat
- Trans fats are formed when liquid oils are made into solid fats by the process of “hydrogenation”. Hydrogenated (trans) fats are often used in fried foods, commercial baked goods, and fast foods.
- Increases bad (LDL) cholesterol
- Lowers good (HDL) cholesterol

Dietary Cholesterol
- Found only in food from animals (eggs, meat, fish, dairy, poultry)
- Raises LDL cholesterol levels

REPLACE saturated fat with a small amount of:

Poly- or Mono- Unsaturated fat
- Found in oils from plants
- Liquid at room temperature
- Lowers bad (LDL) cholesterol
- Increases good (HDL) cholesterol
- Found in certain nuts, avocados, fish, corn, safflower, canola, and olive oil

Source: ©Microsoft Office Online, Clip Art, Fish
There are many medications that work alone or in combination to improve your lipoprotein profile. Below is a list of some of these medications and a description of how they work. Discuss your options with your doctor.

**Statin Medications** are the most effective type of medication at lowering LDL cholesterol levels. They work by shutting down one of the enzymes that produces cholesterol. As a result, the body produces cholesterol more slowly and the liver removes LDL cholesterol more quickly. Examples include:

- Lovastatin (Mevacor)
- Simvastatin (Zocor)
- Pravastatin (Pravachol)
- Atorvastatin (Lipitor)
- Fluvastatin (Lescol)
- Rosuvastatin (Crestor)

**Bile Acid Sequestrants** bind with cholesterol in the small intestine so that it can be excreted rather than absorbed into the body. These medications are often combined with statin medications to lower LDL cholesterol by over forty percent. Examples include:

- Cholestyramine (Questran)
- Colestipol (Colestid)
- Colesevelam (WelChol)

**Fibrates** are effective at lowering triglyceride levels in the blood. They can also increase HDL-cholesterol levels. Fibrates are not very effective for lowering LDL-cholesterol levels. Examples include:

- Gemfibrozil (Lopid)
- Fenofibrate (Tricor; Triglide)
LDL Cholesterol

Sharing the Wealth on Health

Tips for Promoting Healthy LDL Cholesterol Levels

- Discuss your cholesterol testing experience with others. Hearing about the process, results, and treatments may make them feel more comfortable about getting their own cholesterol levels checked.

- When making your favorite baked good, use vegetable oil in place of solid fats (butter or margarine). Then replace half of the oil with an equal amount of unsweetened applesauce. You can also substitute two egg whites or 1/4 cup of egg substitute for each egg in the recipe. Making these substitutions will cut fat, cholesterol, and calories. Let your friends and family try your creations; they will see that healthier foods can taste just as good as the original.

- Talk with a local pharmacist to learn more about medication options.

- Suggest serving healthier foods at group functions. Give out recipe cards and encourage others to bring or share their favorites. A good first step is to provide a variety of foods. You may be surprised when the vegetables are more popular than the chips.

Ideas for Promoting Healthy LDL Cholesterol Levels

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
My Current LDL Cholesterol Level: ________________

LDL Cholesterol Levels

100 mg/dl 130 mg/dl 160 mg/dl 190 mg/dl
Optimal Near Optimal Borderline High Very High

My Personal LDL Cholesterol Level Goals: ________________

_________________________________________________
_________________________________________________
_________________________________________________
_________________________________________________

Steps Toward Attaining My Goals

1. ______________________________________________
2. ______________________________________________
3. ______________________________________________
4. ______________________________________________
5. ______________________________________________
There are many steps you can take to reduce the amount of saturated and trans fat in your diet. Look in your kitchen and find items that contain more than 5g of saturated fat per serving. Check salad dressings, ready-to-eat items, and “junk” foods. Items high in saturated or trans fat should be eaten in limited amounts.

Foods in your kitchen with more than 5g saturated fat per serving:

1. _______________________________________________
2. _______________________________________________
3. _______________________________________________
4. _______________________________________________

What changes can you make in your diet to eat less saturated fat?

_____________________________________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________
Frequently Asked Questions

**Which is a better spread: butter or margarine?**
Vegetable based margarines are the best choice. Look for a tub or soft stick that lists “liquid” or water as the first ingredient, followed by a vegetable oil. Since butter is high in animal or saturated fat, it is not the best choice.

**What type of cooking oils are recommended?**
Use oils that are higher in monounsaturated and polyunsaturated fats such as safflower, corn, canola, soy, and olive oil. These are considered heart healthy because they have unsaturated fat. When possible, use as little oil as possible or substitute with cooking spray.

**Are nuts good to eat? Which ones are the best and why?**
Some nuts have healthy fats and all are sources of protein. They also contain many calories, so be careful not to eat too many. A serving of nuts is 2 tablespoons. Limit your intake to less than 5 servings per week. When possible, choose almonds, hazelnuts, peanuts, pecans, pine nuts, walnuts, and pistachios.

**Should I switch to skim (fat-free) milk? Does it have vitamin D?**
Actually, fat-free milk has the same amount of vitamins and minerals as whole or 2% milk. The only difference is that fat-free milk has all of the saturated fat removed. Lower-fat milk is healthier for anyone over the age of two.

**I am following a heart-healthy diet, but my cholesterol won’t come down. What should I do?**
You may benefit from talking with a dietitian or a nutritionist. He or she can determine how heart healthy your diet is and what dietary improvements you still need to make. Your doctor may also suggest a medication to get your LDL below 100 mg/dl.
**Which cholesterol medication is the best?**

Every person is different and every medication works differently. You need to discuss this issue with your healthcare provider, who will review your medical history, risk factors, and your complete lipoprotein profile. If you have medication concerns or any other concerns, discuss them with your doctor.

**Why doesn't my total cholesterol equal the amount of my LDL, HDL, and triglycerides added together?**

Your total cholesterol is not the sum of only these three numbers. One number that adds to your total cholesterol level (VLDL, or very low-density lipoprotein) is not generally reported.

**What is a lipoprotein profile?**

A lipoprotein profile is a blood test performed after fasting. A lipoprotein profile is used to determine your HDL, LDL, triglyceride, and total cholesterol levels. This test is the best way for your doctor to make an informed diagnosis and suggest an appropriate treatment plan.

**The questions I still have about cholesterol are:**

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________
# Key #7

Be Physically Active

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*Source: ©Microsoft Office Online, Clip Art, Dancing*
Key #7

Be Physically Active

It’s Never Too Late to Start!

Regular physical activity is an important component in healthy aging. It has been proven that regular activity is very beneficial to our health as we age. Physical activity can improve the condition of certain diseases and, in some cases, can even prevent them. Anyone at any age can do some type of activity to improve his or her health. **Always check with your doctor before you start a new physical activity routine.**

Why Should You Be Active?

- Maintain ability to live independently
- Improve muscular strength and endurance
- Improve balance, coordination, and flexibility
- Manage stress
- Increase heart and lung strength
- Improve immune function
- Reduce blood pressure
- Improve sleep
- Increase energy

Exercise Safely

- Increase your activity level slowly, especially if you haven’t been active in a while.
- Warm up before and cool down after you are physically active.
- Drink plenty of fluids no matter what time of the year it is.
- In the winter, be active during the warmest part of the day and dress in layers. In the summer, wear light clothing and be active during the coolest times of day. An umbrella can be useful in winter as a walking stick and in the summer to shade your body. Hats and sunscreen are recommended in all seasons. If the weather quality outside is poor, be active indoors.
- Wear appropriate shoes. It’s better to spend a little more on athletic shoes than to have to pay the doctor for foot problems.
- Carry identification and a cell phone with you in case you need help when you are exercising alone.

Source: ©Microsoft Office Online, Clip Art, Running Shoes
Take Action
Increasing Activity Will Improve Your Health

Plan Your Exercise Program
The American College of Sports Medicine recommends the following when you adopt an exercise program. Check with your doctor before you begin.

Frequency (How often are you active?)
- Try to be active on most days of the week (at least 5 days/week).
- If you are not currently active, start with 1 or 2 days and increase slowly.

Intensity (How hard are you working while being active?)
- You should feel slightly sweaty; it’s a sign of a good workout!
- At a good intensity of activity, you should be out of breath enough that you can talk, but not sing.

Time
- Stay active for at least 10 minutes at a time. Three 10-minute workouts are equal to one 30-minute workout. The key is to keep moving!
- Slowly increase to at least 20-30 minutes a day, working your way up to around 2.5 to 3 hours/week.

Type of Activity
- Change your types of activities throughout the week to increase your overall health and prevent boredom with your routine.

Tips for Getting Started
Set a goal: Think of short- and long-term goals and write them down. Track your progress in an activity log.
Find the time: Set aside one 30-minute block, or two 15-minutes blocks a day to be active.
Turn inactive time into active time: Be active while you watch TV by stretching or doing small chores.
Find an activity buddy: It can help to be accountable to someone else, and for him or her to be accountable to you!
Reward yourself: Place a dollar into a jar after every workout and then treat yourself to something nice every month, like a movie, a night out, or a new pair of tennis shoes!
Make it fun: You’ll continue being active if you enjoy it. Find a motivating exercise video, a fun place to walk, or some great music to accompany you.
Common Barriers | “Active” Responses
--- | ---
“I’m too busy.” | • Three 10-minute blocks of activity are as good as one 30-minute block.  
• Combine activity with other things (walk the dog, etc.).
“It’s too cold.” | • Be active in the middle (warmest part) of the day.  
• Dress from head to toe in several thin layers.  
• Be aware of ice patches.
“It’s too hot.” | • Drink water before, during, and after physical activity.  
• Be active early or late in the day (coolest part).  
• Don’t overdo it. Go at your own pace.  
• Wear light, loose-fitting clothes, a hat and sunscreen.
“I’m too tired” (assuming not due to a medical condition). | • Be physically active earlier in the day.  
• Activity is stimulating and will give you more energy.  
• Regular physical activity will help you sleep better and feel more rested.
“I have no willpower.” | • Set up a regular activity date with a friend.  
• Get out the door. It’s the hardest part!
“I’m active all day working, etc.” | • A planned exercise activity is important.  
• Physical activity is best when it challenges you.
“I have no equipment and don’t belong to a gym.” | • Pick activities that fit into your day and lifestyle.  
• Keep your exercise shoes in the car and take advantage of every opportunity!
“Nobody will exercise with me.” | • Be assertive and let your family and friends know that activity is important to you.  
• Change food dates with your friends into walking dates.

What are the 3 most important things in your life? Nearly all people, of all ages, will list health as one of these top 3, but many difficulties exist that put health on the back burner. Be prepared to address these barriers. The CDC recommends some of the “Active” Responses below.
Tips for Promoting Healthy Activity

- Find out if there are any walking programs for older adults in your community. Some hospitals, community centers, or healthcare plans offer these programs for free. If they do, join the program and tell other people the details so they can join too.

- Encourage people to take little walks, which can add up to big benefits. Park farther away and use stairs when possible.

- Suggest walking partnerships between friends, neighbors, or co-workers. They will provide support for one other. Exercising together can also be more fun.

- If your neighborhood isn’t a good place to walk, brainstorm with others and come up with better or safer places to walk (like a mall) or other ways to be active (like a chair aerobics video tape). Asking others may get them involved and inspire them to start exercising too.

- Suggest that brief “fitness breaks” be added to meeting agendas.

- Start a walking or physical activity group for your family, neighbors, or people in an organization or group you belong to.

- Get others to view your favorite exercise video; maybe swap videos for variety; or start a lending library.

Ideas for Promoting Healthy Physical Activity
In a typical week, I engage in physical activity:

_____________ minutes/day  ____________ days/week

My Personal Physical Activity Goal: ________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Steps Toward Attaining My Goal

1. ________________________________

2. ________________________________

3. ________________________________

4. ________________________________

5. ________________________________

6. ________________________________

7. ________________________________

Source: ©Microsoft Office Online, Clip Art, Jogging
Creating a physical activity program with variety will keep you from getting bored and will provide the most benefit to your overall health.

Physical activity can be put into categories of strength, endurance, balance, and flexibility. Use the space below to come up with as many activities as you can that fall into these categories.

Strength (ex. Lifting Weights) ____________________________________

____________________________________________________________

____________________________________________________________

Endurance (ex. Swimming) _____________________________________

____________________________________________________________

____________________________________________________________

Balance (ex. Heel-to-Toe Walking) ________________________________

____________________________________________________________

____________________________________________________________

Flexibility (ex. Leg Stretches) ________________________________

____________________________________________________________

____________________________________________________________
It is important to start small and work your way up when you start a new physical activity program. This will help you avoid getting injured or pushing yourself too far past your ability level.

Using the examples from Activity #1, write up a brief, daily physical activity routine that will last about 10 minutes. It should be easy and enjoyable.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Now imagine that you have been doing this routine for the past week. As the routine gets easier, you should increase the difficulty so that you will continue to improve your strength and health. What elements can you add to your routine to make it more challenging?

____________________________________________________________________

____________________________________________________________________

Does the new routine give you the recommended 2.5 hrs/wk of physical activity?

____________________________________________________________________

If not, list the additional elements that would bring you to the recommended level.

____________________________________________________________________
Once you have committed yourself to physical activity, the next step is to make a plan to help you maintain your activity program. The following questions can help you to develop a great plan.

What is your goal for activity? ____________________________________________
____________________________________________________________________
____________________________________________________________________

What activities will you do, when, and for how long? __________________________
____________________________________________________________________
____________________________________________________________________

What do you need to get ready? __________________________________________
____________________________________________________________________
____________________________________________________________________

Why haven’t you been active like this before? ________________________________
____________________________________________________________________
____________________________________________________________________

What can you do to get around that problem? ________________________________
____________________________________________________________________
____________________________________________________________________

How will you reward yourself for exercising? _________________________________
____________________________________________________________________
____________________________________________________________________
You can use the log below to keep track of how much physical activity you are getting each week. Tape the log on the wall near your front door where you will see it every time you leave or enter your house. This will remind you to write down how much time you walk when you go out or how much gardening or cleaning you do around the house. Tape a pencil to the log so that you can easily record your physical activity.

### Weekly Physical Activity Log

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
<th>Minutes</th>
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<tbody>
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Center for Aging and Population Health - Prevention Research Center
Physical Activity

Frequently Asked Questions

What is aerobic activity and what are some examples?
Aerobic exercising is a constant movement (at least 10 minutes) in which your heart rate increases. When you are exercising at a good intensity, you should be out of breath enough that you can talk, but not sing. Some examples are walking, hiking, swimming, and classes such as chair aerobics, water aerobics, or step aerobics.

I work in the garden every day in the summer. Is that exercise?
Working in the garden is good because the repetitive motion strengthens your muscles. However, gardening does not necessarily provide the benefits of aerobic activity.

How can I find safe, low cost exercise programs in my area?
A good place to start is with your insurance provider. Each plan has a member services number that can be found on the back of your insurance card. From there, they can direct you to local programs in your area. Additionally, many community centers, churches, libraries and fitness centers offer exercise classes geared toward older adults.

What kind of weights do I need to buy?
If you are just beginning a weight training program, it is not necessary to buy special equipment. Begin by making the motions without using weights. When that becomes too easy, use light, household objects that are easy to hold.

The questions I still have about physical activity are: ______________

__________________________

__________________________

__________________________

__________________________

Source: ©Microsoft Office Online, Clip Art, Exercise
## Key #8

**Maintain Healthy Bones, Joints & Muscles**

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</tbody>
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Source: ©Microsoft Office Online, Clip Art, Jogging
Key #8
Maintain Healthy Bones, Joints & Muscles

Healthy Bones, Joints and Muscles

Our bodies need healthy bones, joints and muscles to let us stay active and protect us from injury. Each has a role in allowing the body to move. Bones support our body and protect our organs. Joints provide flexibility and motion. Muscles support our bones and allow movement.

GOALS

1) Prevent bone loss.
2) Decrease stress on your joints.
3) Talk to your doctor about starting a resistance training exercise program.

Bone Loss, Osteoarthritis and Muscle Weakness
Increase Your Risk for:

- Disability
- Pain
- Loss of Independence
- Death

It is never too late to improve the health of your bones, joints, and muscles. By exercising regularly and maintaining a healthy weight, we can delay or even prevent conditions that damage our bones, joints, and muscles as we age.
Be Informed

Information About Osteoporosis/Osteopenia

GOAL: Prevent bone loss.

8a: What is Osteoporosis/Osteopenia?

As we get older, the amount of minerals in our bones decreases. If we lose too much calcium, we may develop osteoporosis, a disease that results in a loss of bone strength and high potential for fractures.

Osteoporosis is known as a “silent” disease because it has no obvious symptoms. If you are diagnosed with osteoporosis, several treatment options are available to manage the disease and reduce further bone loss, but there is no cure at this time.

Osteopenia is a bone condition that precedes osteoporosis; it can have the same causes but it is less severe than osteoporosis. Early detection and treatment can help prevent it from turning into osteoporosis.

50% of women and 25% of men over age 50 will suffer an osteoporosis-related fracture.

Source: U.S. National Library of Medicine and the National Institutes of Health; Medline Plus

Modifiable Risk Factors for Osteoporosis

Inactive lifestyle
Low-calcium diet
Cigarette smoking
Excessive alcohol use

Non-Modifiable Risk Factors

Age
Past history of a fracture
Thin or small body frame
Family history
Being female and post-menopausal

Picture courtesy of the International Osteoporosis Foundation, 2007

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Page 8.2
Rev. 3.21.2016
Bone Remodeling and Osteoporosis

Bone is living tissue. The cells in our bones are busy breaking down old bone and replacing it with new bone. This process is called bone remodeling. Usually, the amount of bone that is dissolved is equal to the amount of new bone. In osteoporosis, old bone is dissolved, but there is not enough new bone to replace it.

Many older adults who fracture a hip do not return home or live independently again.
Source: cdc.gov/homeandrecreationalsafety/falls/index.html

Factors That Affect Bone Strength

Estrogen works in bone tissue to promote new bone. After menopause, there isn’t as much estrogen available to create new bone. This is why osteoporosis is a much bigger problem in older women than younger women, and more of a problem in women than in men.

Calcium is essential for bone health and strength. When dietary calcium is too low, the body will take calcium from bones and use it for other body functions.

Vitamin D helps the body absorb the calcium and may improve muscle strength and prevent falls.

Since most of us don’t get enough calcium or vitamin D by diet alone, supplements are often recommended. Calcium carbonate and calcium citrate are two such supplements. Although they are available over-the-counter, it is best to talk with your doctor before taking calcium supplements. Your doctor may also recommend that you take additional Vitamin D, so that the calcium can be absorbed properly. But keep in mind that the best source of vitamins and minerals come from your diet.

A doctor can also provide a prescription or recommendation for estrogen supplements. Talk to your doctor about what is best for you.
Take Action

Keep Your Bones, Joints & Muscles Healthy

Six Steps You Can Take Today to Keep Your Bones Healthy

1. Ask your doctor for a bone density test.
2. Manage your weight. Talk to your doctor about a healthy weight for you.
3. Talk to your doctor about taking calcium and vitamin D supplements.
   - The recommended intake of calcium for women ages 51 and older is 1200 mg a day. For men ages 51-70 calcium intake should be 1000mg a day, and 1200 mg a day for men ages 71 and older.
   - The recommended intake of vitamin D is 600 IU a day for men and women age 51-70, and 800 IU a day for those ages 71 and older.
4. Participate regularly in weight-bearing, strength-building, and stretching activities.
5. Avoid behaviors that put you at risk for falls. (See take home activity #2, p. 8.13.)
6. Talk to your doctor about your FRAX® score (see page 8.15 for more information).

What does a Bone Mineral Density (BMD) test involve?
The test is very similar to an X-ray procedure. The test is non-invasive, and takes only a few minutes.

What do the numbers in the BMD test mean?
The World Health Organization classifies women with a BMD result as follows:

- **Osteoporosis** = T-score below −2.5
- **Osteopenia** = T-score between −2.5 and −1.0
- **Normal** = T-score above −1.0

When should I start getting bone density screening?
The National Osteoporosis Foundation suggests that all women over age 65 have the test performed. There are currently no recommendations for men and this test.
**Information About Osteoarthritis**

**GOAL:** Decrease stress on your joints. Strong muscles will support joints and may reduce arthritis pain.

### 8b: What is Osteoarthritis?

Osteoarthritis (OA) is also called degenerative arthritis or degenerative joint disease. It is a chronic condition resulting from loss of cartilage, which cushions the joint (where two or more bones come together). Eventually, the loss of cartilage may leave bone exposed and at risk for damage. This damage can result in pain, stiffness and loss of motion.

Pain and stiffness are worse with excessive activity, but also increase after a long period of inactivity, such as riding in a car.

Doctors diagnose osteoarthritis based on symptoms and a physical examination. X-rays can help determine the severity of the disease and rule out other causes of pain. The knee is the most commonly affected joint, followed by the hip and back (Brandt, 2005).

---

**Risk Factors for Osteoarthritis**

- Age
- Inactive lifestyle
- Overweight/Obese
- Joint Injuries
- Family history
- Bone deformities

---

One in two adults will develop symptoms of knee OA during his/her life.

*Source: http://www.arthritis.org/about-arthritis/types/osteoarthritis/what-is-osteoarthritis.php*
Take Action

Keep Your Bones, Joints & Muscles Healthy

Prevent Osteoarthritis

Certain factors increase your risk for osteoarthritis, especially being overweight and having previous joint injury. Overuse (including repetitive motions), lack of physical activity, and heredity also increase your risk for osteoarthritis.

Everyone is at risk for osteoarthritis as they age. Take action now to prevent osteoarthritis: stay active, maintain muscle strength to support and protect your joints, and keep a healthy weight. If you are overweight, even a small amount of weight loss may cut knee pain by half! Check page 5.5 for your healthy Body Mass Index (BMI) and talk to your doctor about a healthy weight for you.

Prevent Osteoarthritis from Worsening

If you have been diagnosed with osteoarthritis, take action to decrease the stress on your joints. Talk to your doctor about the following:

- Starting a muscle strength training program
- Being physically active at least 30 minutes a day most days of the week
- Avoiding overuse injury and pain
- Deciding your healthy weight and setting a plan to reach and maintain that weight
- Reviewing your medication list for medications that might be affecting your calcium and vitamin D levels (prescribed and over-the-counter)

Why is physical activity important?

Physical activity increases the mass and density of bones, and also increases the strength of the muscles that support the bones and joints.
Information About Muscle Weakness

GOAL: Talk to your doctor about starting a resistance-training exercise program.

8c: What is Muscle Weakness?
Starting around age 45, we slowly begin to lose muscle strength. This age-related loss of muscle strength tends to get worse the older we get. The reasons for loss of strength are partly due to loss of muscle tissue and inactivity.

Just like osteoporosis and osteoarthritis, muscle weakness increases your risk of falling, injury and frailty. Signs of muscle weakness include difficulty with getting up from a chair, more difficulty lifting heavy objects, or difficulty climbing stairs.

In older adults, muscle strength is lost at a rate of 3% each year.
Source: Park S. W., Goodpaster B. H., Newman A.B. 2006

Risk Factors for Muscle Weakness
- Age
- Inactive lifestyle
- Overweight/Obese
- Tobacco use
- Hormonal changes
- Poor nutrition

Source: ©Microsoft Office Online, Clip Art, Exercising
Take Action

Keep Your Bones, Joints & Muscles Healthy

Prevent or Reverse Muscle Weakness

Before beginning ANY exercise program, discuss it with your doctor. Your doctor will make sure you are healthy enough to begin to exercise.

The good news is that research shows we can improve our muscle strength no matter our age! Aerobic exercises like walking are good for our heart but are not enough to keep our other muscles strong.

The best exercise for increasing muscle strength is called “resistance training”. These kinds of exercises make our muscles contract (work against an opposing force) which makes them stronger. Examples include:

- Using weights or dumb bells
- Resistance bands
- Exercise machines and isometric exercise
- Water exercises like swimming and aqua-aerobics (provides resistance while reducing stress on bones and joints.)
- Maintaining routine daily activities

If You Have Lost Muscle Strength

1. Talk to your doctor about possible causes for your weakness and to see if you can begin a resistance training program.
2. See if there are any exercise classes offered at a neighborhood community center, school, church or other location that you could attend.
3. Find an exercise buddy; you can encourage each other to work out and it will make exercise more fun for both of you.
4. Remember to start any new exercise program slowly; you will eventually be able to do more the longer you exercise.
Encourage Action

Bone Strength

Our bones become stronger and denser the more we use them. It is important to create and sustain bone strength by doing activities that require some weight-bearing. These are activities that are usually done while standing. They require that our muscles work against gravity. Examples of such activities include walking, jogging, yard work, aerobic exercise, climbing stairs, biking (outside or stationary), and dancing.

Joint Health

Exercises that improve strength, balance and flexibility can help keep joints in good shape. Exercise builds up muscle strength and strong muscles can then help to stabilize joints. Always talk to your doctor before beginning any exercise program.

Overuse and joint trauma can lead to osteoarthritis. Proper footwear and good lighting can prevent joint injury during activity. Being overweight places a lot of stress on joints and can increase the chance of developing arthritis.

Muscle Strength

Strength loss begins around age 45. The more strength you lose, the less able you will be to do daily activities like climbing stairs, cleaning house, walking to the bus stop, grocery shopping or performing other activities.

Strength training activities are important for maintaining muscle strength. This requires lifting or pushing weights and gradually increasing the amount of weight used. Ways of doing strength training activities include purchasing hand and ankle weights, lifting emptied milk jugs that have been filled with sand, or lifting socks that have been filled with beans and then tied shut. Check your strength by seeing if you can get up from a chair without using your arms to push up or by lifting a gallon of milk from a table to your chest.

Source: ©Microsoft Office Online, Clip Art, Dumbbells
Bones and Muscles

Sharing the Wealth on Health

Tips for Promoting Healthy Bones, Joints and Muscles

- The next time you are at a friend or family member’s house, look for things that are a fall hazard. If you see any, let the person know how to fix them.

- Locate exercise programs in your community and let other people know about them. Physical activity can improve the strength of your muscles and bones, as well as improve balance to reduce the risk of falling.

- Encourage people to do weight-bearing activities in their homes. A roll of quarters from the bank can easily be used as a weight in these exercises.

- Encourage people to talk to their doctor about getting a bone density test.

- Share your bone density test experience with others. With more information, people may be more likely to schedule their own test.

- Contact your local hospital or clinic and ask if they will sponsor osteoporosis and/or osteoarthritis education events, including free bone density heel scans.

- Discuss your weight with your doctor.

Ideas for Promoting Healthy Bones, Joints and Muscles

_______________________________________________________

_______________________________________________________

_______________________________________________________

_______________________________________________________

Source: ©Microsoft Office Online, Clip Art, Bone
Bones, Joints and Muscles

Personal Goals & Action Steps

My next doctor appointment is: ________________________________ Date

I will ask my doctor if I have: □ osteoporosis/osteopenia
□ osteoarthritis  □ muscle weakness  □ none of these

My BMI (body mass index) is: ____________________________

My doctor said I should:
□ gain _____ pounds  □ lose ____ pounds
□ maintain weight

My Personal Bone, Joint and Muscle Health Goals are:

__________________________________________________

__________________________________________________

Steps Toward Attaining My Goals

1. ______________________________________________________
   ______________________________________________________
   ______________________________________________________
2. ______________________________________________________
   ______________________________________________________
   ______________________________________________________
3. ______________________________________________________
   ______________________________________________________
   ______________________________________________________

Source: ©Microsoft Office Online, Clip Art, Skeleton
Take-Home Activity #1

Bones, Joints and Muscles

Go through your kitchen and look for foods that are high in both calcium and vitamin D. List these foods below.

Don’t be surprised if most of these foods are dairy products. Some leafy greens, beans, and fish with bones are also rich in calcium. Dairy products are often fortified with vitamin D. Some examples, with average amounts, include:

<table>
<thead>
<tr>
<th>Food</th>
<th>Calcium (mg)</th>
<th>Vitamin D (IU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kale (1 cup chopped)</td>
<td>101</td>
<td>0</td>
</tr>
<tr>
<td>Fat-free (skim) milk (1 cup)</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>Canned salmon with bones (3 ounces)</td>
<td>180</td>
<td>360</td>
</tr>
<tr>
<td>Mustard Greens (1/2 cup cooked)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Spinach (1/2 cup cooked)</td>
<td>130</td>
<td>0</td>
</tr>
<tr>
<td>White beans (1 cup boiled)</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>Great Northern beans (1 cup boiled)</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>Low-fat yogurt (6 ounces)</td>
<td>300</td>
<td>80</td>
</tr>
<tr>
<td>Cheese (1 ounce)</td>
<td>200</td>
<td>6</td>
</tr>
<tr>
<td>Fortified orange juice</td>
<td>300</td>
<td>137</td>
</tr>
</tbody>
</table>

Vitamin D can also be produced by exposure of your skin to the sun, but safe exposure is key. The amount of vitamin D produced this way depends on the time of day, where you live, and how dark your skin is.

What other foods may have calcium and vitamin D added? (Hint: Check your orange juice, cereals, and bread.)

Now that you know which foods contain calcium and vitamin D, you are on your way to making better meal choices that can increase bone strength. Try incorporating more of these foods into your eating plan.
Bones, Joints and Muscles

Take-Home Activity #2

Preventing Falls and Injuries

Falling is a serious problem for people as they age. There are many things you can change in your home that will reduce the risk of falling. Below is a list of problems and their solutions. Go room to room in your home and see if there is anything that you can change. Here are some ideas about what to change.

Things You Can Do To Prevent Falls

**Lights:** Keep hallways, stairs, and rooms well lit. Put night lights in hallways, bedrooms, and bathrooms, and keep a flashlight next to your bed.

**Stairs:** Cover stairs with a non-slip surface. Make sure the handrails are sturdy.

**Kitchen:** Keep items you use regularly on a low shelf. Use a stable step stool to reach items on higher shelves.

**Bathroom:** Handrails beside the bathtub, toilet, and shower can provide extra support. A rubber mat in the bathtub can prevent slipping.

**Floors:** Avoid throw rugs, tack down carpet edges, use nonskid wax on floors, and remove electrical cords from well-used areas.

Bedroom: ________________________________________________________________

________________________________________________________________________

Bathroom: ________________________________________________________________

________________________________________________________________________

Kitchen: ________________________________________________________________

________________________________________________________________________

Living Room: ____________________________________________________________

________________________________________________________________________

Stairs: ________________________________________________________________
Osteoarthritis, osteoporosis, and loss of muscle strength are very common conditions in older adults. While there is no “cure” for any of these, there are steps you can take to prevent them. If you already have been diagnosed, there are treatments to help manage them. Talk to your doctor about the following items to reduce your risk of developing osteoporosis, osteoarthritis and muscle weakness, or to prevent them from getting worse if you already have them:

Have I talked to my doctor about an exercise plan?  Yes  No

This is my exercise plan (see “Key 7: “Be Physically Active” for ideas):

____________________________________________________________________
____________________________________________________________________

Have I talked to my doctor about managing my weight?  Yes  No

This is my weight plan:

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

These are my medications for osteoporosis, osteoarthritis and muscle weakness:

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Frequently Asked Questions

What is a FRAX® score?
FRAX® was developed by the World Health Organization. This score reflects your risk of fracturing a hip or having some other major orthopedic fracture over the next 10 years. It is unique because it includes both your bone density and other risk factors. Talk with your health care provider to learn more about finding out your score!

Is osteoarthritis the same as degenerative arthritis?
Yes, these terms refer to the same thing. There are over 100 forms of arthritis. Osteoarthritis is the most common type and is what most people think of when they hear the word “arthritis”.

How do I know if I am overusing my joints?
Listen to your body. Pain is its way of telling you to stop and rest.

Is a bone spur the same thing as arthritis?
No, but they may be related. Bony spurs can form in a joint as part of the arthritis process. They can also form at the attachment of a tendon to the bone as seen with a heel spur.

Is osteoarthritis the same as “rheumatism”?
Rheumatism is an “old time” general term for aches and pains from many causes, which could include osteoarthritis. It could also mean Rheumatoid arthritis, which is a specific type of arthritis that affects many joints of the body at once.

The questions I still have about bones, joints and muscles are:

_______________________________________________________
_______________________________________________________
_______________________________________________________

Source: ©Microsoft Office Online, Clip Art, Bones
# Key #9

## Maintain Social Contact

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
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<tbody>
<tr>
<td>Handout: Maintain Social Contact</td>
<td>9.1</td>
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<tr>
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<tr>
<td>Personal Goals and Action Steps</td>
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<tr>
<td>Take-Home Activities</td>
<td>9.5</td>
</tr>
<tr>
<td>Frequently Asked Questions</td>
<td>9.7</td>
</tr>
</tbody>
</table>

*Source: ©Microsoft Office Online, Clip Art, Cards*
Maintain Social Contact

Staying connected to friends, family and the community helps you to stay healthy. Social contact can improve your physical and mental health. Research shows that people who regularly interact socially maintain their brain vitality (www.alz.org). Consider some of the benefits of maintaining social contact:

- Prevent cognitive decline
- Prevent isolation
- Improve self esteem
- Focus on others, not self
- Improve physical health
- Improve attitude/outlook on life
- Reduce stress
- Have fun

Remaining Socially Active Can Help Prevent Mental Decline

Several helpful definitions:

Cognition: The scientific term for "the process of thought." Cognitive decline refers to a worsening of some type of thought process or brain functioning. Cognitive impairment refers to some type of problem with thought or brain functioning. Mild cognitive impairment (MCI) is one category of cognitive impairment that is less severe than dementia. Someone with MCI may have some memory trouble or trouble finding words but they can still solve everyday problems.

Dementia: A significant loss of intellectual abilities, such as memory capacity, severe enough to interfere with social or occupational functioning. While Alzheimer’s Disease is the most common cause of dementia, there are many other causes.

Alzheimer’s Disease leads to irreversible loss of neurons and dementia. The clinical hallmarks are progressive impairment in memory, judgment, decision making, orientation to physical surroundings, and language.

Source: Alz.org (Alzheimer’s Association, 2016)
Take Action

Participate in Social Activities

Key Ideas for Maintaining Social Contact

- Greet or talk to someone each day
- Plan your day to include others
- Reach out by being a volunteer
- Call a person in need each day
- Learn a new hobby
- Find a part-time job
- Go to a movie with a friend or two
- Write or e-mail family and friends
- Eat or cook with others
- Take dance lessons
- Meet a new neighbor
- Explore the Internet to reconnect with others
- Travel to visit family and friends or invite them over
- Volunteer as a foster family for cats or kittens at an animal shelter
- Start a weekly card or board game club with neighbors, family, or friends
- Travel with other seniors or with local or out-of-state group travel tours
- Join groups through senior centers, YMCAs, YWCAs, and other organizations

Programs You Can Join

**Senior Companion Program:** This program reaches out to older adults who need extra assistance to live independently in their own homes or communities. Senior companions assist in essential ways, such as companionship, friendship, assisting with simple chores, and transportation.

**Foster Grandparents Program:** Seniors volunteer to help children with special needs. They offer emotional support, mentoring, and tutoring to children.

**Retired Seniors Volunteer Program (RSVP):** This program matches personal interests and skills of older adults with opportunities to help solve community problems. These volunteers provide limitless community services.

For More Information About These Programs:
Call 1-800-424-8867 or visit [www.seniorcorps.gov](http://www.seniorcorps.gov)
Tips for Promoting Social Contact

- Get involved with community organizations and encourage others to join with you. Offer to carpool or take the bus together.

- How welcoming are the organizations that you belong to? Encourage them to hold frequent “New Member” activities and to organize carpools for their events. This may encourage those without their own transportation to participate.

- Take a deck of cards, board games, or puzzles to group events or activities.

- Recognize that not everyone is socially isolated by choice. Many people cannot get out to see other people because they cannot walk or stand, or because they have no transportation. Some people may not interact with others because they are depressed or because side effects from medications make them feel down or tired. While you are not responsible for other people’s social activities, you may be able to help by suggesting that they see their doctors or by helping them think about social activities they can do at home.

Ideas for Promoting Social Contact with Others

<table>
<thead>
<tr>
<th>Idea 1</th>
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<tbody>
<tr>
<td>Idea 2</td>
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<tr>
<td>Idea 3</td>
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<tr>
<td>Idea 4</td>
</tr>
<tr>
<td>Idea 5</td>
</tr>
</tbody>
</table>

Source: ©Microsoft Office Online, Clip Art, Board Games
Social Contact

Personal Goals & Action Steps

My Personal Social Activity Goals: ________________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________

Steps Toward Attaining My Goal

1. _______________________________

2. _______________________________

3. _______________________________

4. _______________________________

Source: ©Microsoft Office Online, Clip Art, Book Club
There are many resources in the community that can provide social contact. Identify 3 volunteer or work opportunities (e.g. the local hospital or food bank), 3 clubs (e.g. a book club), and 3 ways to combine physical or mental activity with social activity (e.g. an aerobic class). **Write down the information** on these resources below. Call the phone numbers or visit the Web sites to make sure they are still in service. Also make notes about which resources seemed the most helpful or friendly.

<table>
<thead>
<tr>
<th>Volunteer or Work Opportunities</th>
<th>Phone Number/Web site</th>
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</table>

<table>
<thead>
<tr>
<th>Social Clubs or Groups</th>
<th>Phone Number/Web site</th>
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</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical or Mental Activities That Are Also Social</th>
<th>Phone Number/Web site</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>
Social Contact

Take-Home Activity #2

Think of a person who is socially isolated. This person could be a family member, a friend, a co-worker, or simply an acquaintance. With the image of that person firmly in your mind, answer the following questions.

Why did you identify this person as being isolated? What behaviors and characteristics does he/she exhibit?

____________________________________________________________________
____________________________________________________________________

Has s/he displayed any changes in behavior or characteristics over the last 2 months? If yes, briefly describe these changes.

____________________________________________________________________
____________________________________________________________________

What can you say or do that might be of help to him/her? Be specific.

____________________________________________________________________
____________________________________________________________________

Does the nature of your relationship with her/him affect how much or how little you are involved in helping him/her? If yes, please explain.

____________________________________________________________________
____________________________________________________________________

What steps do you need to take to manage your involvement with this person’s isolation, without it becoming a major worry for you?

____________________________________________________________________
____________________________________________________________________
I just like to be alone. Is that bad?
Some people prefer solitude, which is different from being isolated. They have meaningful connections with others, but just prefer more time alone than some of their peers. There are those, on the other hand, who are truly isolated by circumstances and who may suffer from the risks of social isolation.

Why do we have memory problems as we get older?
As we get older, we tend to get wiser in many ways. Thanks to experience, we may be better at making decisions, have bigger vocabularies, and be more expert in certain areas than we were when we were younger. As our brains get older, however, it may be a bit harder for us to learn certain information or remember things. It may be harder, for instance, to remember your neighbor’s phone number, or your grandson’s birthday.

Will doing puzzles keep my brain healthy?
Pushing your brain to try new things won't hurt you, and it may even help. The more you use your brain, the better it will work. Read. Do a crossword puzzle. Play bridge. Join a discussion group at a senior center. Take a class at your local community college. Learn to play the piano or speak Spanish. The key is to try new things and to keep variety in your activities.

What else can I do to keep my brain healthy?
Physical activity is probably the best thing you can do to keep your mind healthy. Exercise increases blood flow to the brain and facilitates oxygen consumption, which encourages the growth of new brain cells. This helps keep the brain healthy and working well.

The questions I still have about maintaining social contact are:
Key #10
Combat Depression

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handout: Combat Depression</td>
<td>10.1</td>
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<tr>
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<tr>
<td>Frequently Asked Questions</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Source: ©Microsoft Office Online, Clip Art, Garden
Understanding Depression

Have you ever said “I am really depressed”? At such times, it is important to ask if we are depressed or sad, then discuss such concerns with a doctor. This is an especially critical distinction as we age because of the tendency for many people to confuse depression and sadness. Sometimes we call ourselves ‘depressed’ to describe the down or sad feelings that we all experience from time to time. When you have depression, you have trouble functioning in work, home or social relationships for more than two weeks (National Institute of Mental Health, 2016). Being sad is a normal part of life. Being depressed is not a normal part of life at any age.

Symptoms of Depression

- A persistent sad or low mood
- Feeling guilty, hopeless, or worthless
- Feeling nervous or “empty”
- Excessive fatigue or loss of energy
- Loss of interest or pleasure in activities
- Difficulties sleeping or staying awake
- Eating more or less than usual
- Restlessness or agitation
- Persistent headaches, stomach aches, or chronic pain
- Moving or talking more slowly than usual
- Difficulty concentrating or making decisions
- Feeling as if life is not worth living
- Thoughts of suicide or death

Some Causes of Depression

Depression can result from a range of causes, including genetics, biological changes in the brain, illness, adverse drug reactions, or stressful life events such as loss of a spouse, the sale of one’s home, or retirement. (National Institute of Mental Health, 2016)
If you have experienced any of these depression symptoms for more than two weeks, it is important to acknowledge that you may need treatment. Getting treatment is a sign of strength. Discuss your symptoms with your doctor.

### Things You Can Say to Start a Discussion with Your Doctor

- I feel sad most of the time.
- I feel worn out and tired most of the time.
- I’m having difficulty sleeping.
- I just can’t seem to get past the loss of my spouse or friend.
- I’ve been “down in the dumps” and nothing seems to cheer me up.
- I just don’t enjoy life anymore.
- I have been crying a lot lately.
- I feel like people don’t like me.
- I feel like my life is not worth living.

For most people, depression will get better with treatment.

### Diagnosing and Treating Depression

As you saw earlier, there are a number of symptoms of depression. Not every person will experience the same symptoms. “Some people have only a few symptoms, while others have many. Symptoms can vary over time.” (University of Pittsburgh Medical Center, 2016). It is important, therefore, to have a thorough evaluation by your family doctor.

The good news is that depression is treatable. Two major types of treatment include medication and psychotherapy, individually or together (National Institutes of Mental Health, 2016). Begin with your family doctor to seek treatment. If you don’t have a family doctor, look in the telephone directory or on the internet for “mental health providers” “behavioral health providers” or “social workers” to find help in your area.
• Encourage your friends and family to follow all of the “10 Keys”™ to Healthy Aging. Improving your overall health and being physically and socially active can improve your mood and help reduce symptoms of depression. Also be aware that people who are depressed often do not seek help for other health problems. Treating depression can lead to a better life and better health.

• If you spend a lot of time with someone who you believe is depressed, don’t forget how important it is to take care of yourself. It can be difficult to live or work closely with someone with depression, and seeing a counselor or psychiatrist can help you, as well as provide an excellent example for those around you.

• Fight stigma against people with mental illness. When someone appears to be different, we may view him or her in a negative way. This is known as stigma. Stigma is a reality for people with depression and other mental illnesses. They report that how others judge them is one of their greatest problems when trying to live a complete and satisfying life. Many people have been led to believe that a person with depression has a weak character. This is not true. Often the only way to know whether someone has a mental illness is if he or she tells you. Most people don’t realize that many people they know suffer from depression.

• Write down some things you might say to someone to encourage him or her to get an evaluation for depression. Consider statements like: “You seem down to me. Is that true?” or “I’m concerned about you being so much quieter than you used to be. I encourage you to make an appointment with your doctor. I’ll go with you if you’d like me to.”
My Personal Mental Health Goals:______________________________

______________________________

______________________________

______________________________

______________________________

______________________________

Steps Toward Attaining My Goals

1. ___________________________________________________________________

2. ___________________________________________________________________

3. ___________________________________________________________________

4. ___________________________________________________________________

Source: ©Microsoft Office Online, Clip Art, Hands
**Take-Home Activity #1**

**Depression**

**Geriatric Depression Scale (GDS) Short Form**

Choose the best answer for how you have felt over the past week.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you basically satisfied with your life?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have you dropped many of your activities and interests?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Do you feel that your life is empty?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Do you often get bored?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Are you in good spirits most of the time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Are you afraid that something bad is going to happen to you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Do you feel happy most of the time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do you often feel helpless?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Do you prefer to stay at home rather than going out and doing things?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Do you feel you have more problems with memory than most?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Do you think it is wonderful to be alive now?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Do you feel pretty worthless the way you are now?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Do you feel full of energy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Do you feel that your situation is hopeless?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Do you think that most people are better off than you are?</td>
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</tbody>
</table>

Score 1 point for every “yes” in questions 2, 3, 4, 6, 8, 9, 10, 12, 14, 15
Score 1 point for every “no” in questions 1, 5, 7, 11, 13
A total score of greater than 5 suggests the need to see a doctor. If you have any concerns about your response call the doctor for further discussion and evaluation.

(Sheikh & Yesavage, 1986)
If you are experiencing symptoms of depression, the most important thing you can do is to see a doctor. Your doctor can recommend a psychiatrist or psychologist as they specialize in depression and other mental health concerns.

**Contact a trusted healthcare provider** and ask for a recommendation for a mental health provider in your area. Even if you feel that you do not need to meet with this person at this time, it is always good to have the name and number of someone in case you do feel the need to talk or want to have a name to give to others.

<table>
<thead>
<tr>
<th>Name of Psychiatrist/Psychologist</th>
<th>Phone Number</th>
</tr>
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<tbody>
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<td></td>
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</table>

In addition to your doctor, there are many other organizations that can provide help in dealing with depression. **Write down** one or two of these local resources and their phone numbers below. Also ask if they have a 24-hour phone number that you could call if you had questions or concerns.

The following list is an example of some of the other available resources. Not every program may be available in your community, but you may be surprised at how many you find. **Some resources to explore:** local hospitals, spiritual leaders, community mental health centers, peer counseling programs, university depression research programs, employee assistance programs, family service agencies, and private clinics or facilities.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Phone Number</th>
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<table>
<thead>
<tr>
<th>24-Hour Phone Number</th>
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<thead>
<tr>
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**What is a Geriatric Psychiatrist?**
A medical doctor who has special training in mental health in older adults.

**What is clinical depression?**
A sad mood that lasts two weeks or longer and affects your ability to perform daily activities such as work, socialization, self-care, pleasure, etc.

**How can depression medications help?**
Medications for depression help to increase your level of serotonin (a chemical in the body). It usually takes 2 or more weeks for the medication to begin working. Medication reduces the symptoms of depression, but doesn’t change your personality.

**I have side effects from my antidepressants. Are they worth taking?**
“You may need to try several different antidepressant medicines before finding the one that improves your symptoms and has manageable side effects. A medication that has helped you or a close family member in the past will often be considered.” (National Institute of Mental Health, 2016)

**If I feel fine, can I stop taking my antidepressant?**
Many individuals “feel fine” because the medication has controlled the depression. It is extremely important to discuss the desire to stop medication with your physician. Stopping some antidepressants suddenly can cause serious withdrawal symptoms.

The questions I still have about depression are:  

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
# Appendix A: References

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*Source: ©Microsoft Office Online, Clip Art, Library*
Be Informed

Information About Body Mass Index (BMI)

Inform and Motivate

Maintain a Healthy Weight: Healthy weight is best defined by the Body Mass Index (BMI), which can be estimated by a table of weight and height. A BMI over 30 is too high for older adults.

![BMI Table](https://example.com/bmi_table.png)

Source: University of Pittsburgh Center for Aging and Population Health-Prevention Research Center
Appendix A: References

Resources for Further Information*

Key #1: Lower Systolic Blood Pressure

American Heart Association
http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure_UCM_002020_SubHomePage.jsp

Centers for Disease Control and Prevention
http://www.cdc.gov/heartdisease

National Institutes of Health
http://www.nhlbi.nih.gov/health/health-topics/topics/hbp

Key #2: Stop Smoking

American Lung Association
http://www.lung.org

Tobacco Information and Prevention Source,
US Centers for Disease Control and Prevention
http://www.cdc.gov/tobacco/

University of Pittsburgh Medical Center, Health Library
http://www.upmc.com/patients-visitors/education/breathing/Pages/smoking-and-lungs.aspx

Key #3: Participate in Cancer Screenings

Centers for Disease Control and Prevention, Cancer Information
http://www.cdc.gov/cancer/ncccp/about.htm

The American Cancer Society

The National Cancer Institute, US National Institutes of Health
www.cancer.gov
http://www.cancer.gov/dictionary/?CdrID=45333

*Please insert an underscore ( _ ) where the space appears in the Web site address.
Key #3 (continued):

University of Pittsburgh Medical Center, Health Library
http://www.upmc.com/health-library/Pages/default.aspx

Key #4: Get Immunized Regularly

Centers for Disease Control and Prevention
http://www.cdc.gov/vaccines

National Institutes of Health
www.niaid.nih.gov/topics/vaccines/Pages/Default.aspx

Key #5: Regulate Blood Glucose

American Diabetes Association
http://www.diabetes.org

National Center for Chronic Disease Prevention and Health Promotion
http://www.cdc.gov/diabetes/

National Institutes of Health
http://www.nih.gov

Key #6: Lower LDL Cholesterol

American Heart Association
http://www.heart.org/HEARTORG/

Centers for Disease Control and Prevention
http://www.cdc.gov/stroke/

National Institutes of Health
http://www.nih.gov

*Please insert an underscore (_ ) where the space appears in the Web site address.*
Key #7: Be Physically Active

The American College of Sports Medicine  
http://www.acsm.org/

Centers for Disease Control and Prevention  
http://www.cdc.gov/physicalactivity/

Key #8: Maintain Healthy Bones, Joints and Muscles

American College of Rheumatology  
http://www.rheumatology.org/I-Am-A/Patient-Caregiver

Centers for Disease Control and Prevention  
http://www.cdc.gov/

International Osteoporosis Foundation  
http://www.iofbonehealth.org/

National Institute on Aging  
http://www.nia.nih.gov/

National Osteoporosis Foundation  
http://www.nof.org/

National Institutes of Health  
http://www.nih.gov/

Key #9: Maintain Social Contact

Alzheimer’s Association  
*http://www.alz.org/we_can_help_remain_socially_active.asp

Corporation for National & Community Service, Senior Corps  
http://www.seniorcorps.gov/

*Please insert an underscore ( _ ) where the space appears in the Web site address.
Key #10: Combat Depression

National Institute of Mental Health

Substance Abuse & Mental Health Services Administration

*Please insert an underscore ( _ ) where the space appears in the Web site address.

**Remember, Web site addresses change periodically. If the Web site is no longer available, type in the organization that you are looking for and search the Internet.
References by Page Number

Introduction


Key #1: Lower Systolic Blood Pressure

Page 1.1 - What is High Blood Pressure? [Internet]. Dallas, TX: American Heart Association; 2012 [updated 2013 March 1; cited 2013 Aug 30]. Available from: http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/AboutHighBloodPressure/What-is-High-Blood-Pressure_UCM_301759_Article.jsp


Page 1.2 - Prevention & Treatment of High Blood Pressure [Internet]. Dallas, TX: American Heart Association; 2012 [updated 2012 June 6; cited 2013 Aug 30]. Available from: http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/PreventionTreatmentofHighBloodPressure/Prevention-Treatment-of-High-Blood-Pressure_UCM_002054_Article.jsp


Key #2: Stop Smoking

Page 2.2 - Clearing the Air [Internet]. National Cancer Institute; April 2003 [cited 2013 Aug 30]. Available from: http://smokefree.gov/free-resources

Page 2.2 - Steps to prepare [Internet]. Tobacco Control Research Branch, National Cancer Institute; [cited 2013 Aug 30]. Available from: http://smokefree.gov/steps-to-prepare

The Web site was created by the Tobacco Control Research Branch of the National Cancer Institute, with important contributions from other nationally recognized agencies and organizations such as the Centers for Disease Control and Prevention and the American Cancer Society.

Page 2.2 - Smoking and tobacco use: How to quit [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; [updated 2013 April 18; cited 2013 Aug 30]. Available from: http://www.cdc.gov/tobacco/quit_smoking/how_to_quit/index.htm


Page 2.5 - Clearing the Air [Internet]. National Cancer Institute; April 2003 [cited 2013 Aug 30]. Available from: http://smokefree.gov/free-resources


Key #3: Participate in Cancer Screening


Key #4: Get Immunized Regularly


Key #5: Regulate Blood Glucose


Page 5.2 - Preventing Diabetes [Internet]. Atlanta, GA: Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion; [updated 2015 September 30; cited 2013 Aug 30]. Available from: http://www.cdc.gov/diabetes/basics/prevention.html


Key #6: Lower LDL Cholesterol


Page 6.2 - Prevention and Treatment of High Cholesterol [Internet]. Dallas, TX: American Heart Association; 2011 [updated 2013 May 1; cited 2013 Aug 30]. Available from: http://www.heart.org/HEARTORG/Conditions/Cholesterol/PreventionTreatmentofHighCholesterol/Prevention-and-Treatment-of-High-Cholesterol_UCM_001215_Article.jsp

Page 6.3 - Good vs. Bad Cholesterol [Internet]. Dallas, TX: American Heart Association; 2012 [updated 2013 May 1; cited 2013 Aug 30]. Available from: http://www.heart.org/HEARTORG/Conditions/Cholesterol/AboutCholesterol/Good-vs-Bad-Cholesterol_UCM_305561_Article.jsp

Page 6.3 - What Your Cholesterol Levels Mean [Internet]. Dallas, TX: American Heart Association; 2011 [updated 2013 Aug 8; cited 2013 Aug 30]. Available from: http://www.heart.org/HEARTORG/Conditions/Cholesterol/AboutCholesterol/What-Your-Cholesterol-Levels-Mean_UCM_305562_Article.jsp

**Key #7: Be Physically Active**


Page 7.3 - Physical Activity for Everyone: Physical Activity and Health [Internet]. Atlanta, GA: Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health; 2011 [updated 2011 February 16; cited 2013 Aug 30]. Available from: http://www.cdc.gov/physicalactivity/everyone/health/index.html
Key #8: Maintain Healthy Bones, Joints and Muscles


Key #9: Maintain Social Contact


Key #10: Combat Depression


**Remember, Web site addresses change periodically. If the Web site is no longer available, type in the organization that you are looking for and search the Internet.**
The foundation of the “10 Keys”™ was developed by Carol Milas, MS.; Connie Bayles, DrPH; Steve Albert, DrPH, MS; Lew Kuller, MD, DrPH; and Anne Newman, MD, MPH.

The 2014-2016 updates of the “10 Keys”™ Workbook are a collaborative effort with contributions by the following University of Pittsburgh faculty, staff, and students: Lew Kuller, MD, DrPH; Anne Newman, MD, MPH; Jane Cauley, DrPH; Molly Conroy, MD, MPH; Janice Zgibor, RPh, PhD; Joni Vanderbilt, MPH; Emily Andsager; Andrea Casas, MPH; Hristina Denic, RN, MPH; Sara Einhorn, MPH; Mini Jacob, MD, PhD; Emily Kieffer; Elizabeth Rodgers, RYT, MPH; and Jenn Sloan, MPH.

Reference under the Terms and Conditions of the Award "Inventions" 37 CFR 401.14 (standard patent rights)

Reference "Publications" under Terms and Conditions of the Award

Reference 45 CFR 74.24(h) Program Income - (h) "The Patent and Trademark Laws Amendments, 35 USC section 200-212, award for performance of experimental, developmental, or research work. Unless the terms and conditions for the award provide otherwise, recipients shall have no obligation to HHS with respect to program income earned from license fees and royalties for copyrighted material, patents, patent applications, trademarks, and inventions made under an award.”