The “10 Keys”™ to Healthy Aging
Instructor Manual

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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

CREATING A HEALTHIER COMMUNITY

The Center for Aging and Population Health’s “10 Keys”™ to Healthy Aging program was developed to improve the health of adults as they age. Ultimately, as individuals become healthier, our community will also be healthier. As we all know, creating a more vigorous community is no small task and it will take many people, organizations, and policy changes to advocate for prevention and to make healthy aging a priority for our nation. You play a vital role in this important process. Thank you for your interest in healthy aging and in your willingness to lead a “10 Keys”™ program in your community. We appreciate your energy and devotion to building a healthier adult community and being part of this important public health effort.

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 program 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: www.caph.pitt.edu.
**INTRODUCTION**

**HISTORY OF THE “10 KEYS”™**

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 or healthy aging in functional older adults.

The “10 Keys”™ to Healthy Aging program has been implemented in efforts in Allegheny County, the State of Pennsylvania, nationally throughout the United States, and globally in multiple countries. It has been adopted as the Corporate Wellness Curriculum for companies such as PPG. These manuals have been translated into at least nine languages.

**GOAL & MISSION OF THE PREVENTION RESEARCH PROGRAM**

The goal of the Prevention Research Center is to lead our community in efforts that will improve the health and function of older adults at highest risk for chronic disease and disability.

The mission of the Prevention Research Center is to promote behavioral and environmental change to increase disability-free life expectancy, with a special focus on prevention of disease and disability in old age.

We are confident that the “10 Keys”™ to Healthy Aging can be a tool and a resource to help us achieve the Prevention Research Center’s goal and implement our mission.
INTRODUCTION

YOUR ROLE AS COACH & ADVOCATE

As instructors, we are committed not only to teaching about the “10 Keys”™, but more importantly empowering others as coaches and advocates to adopt the “10 Keys”™. As more individuals adopt keys, communities will become healthier. Creating healthier communities is key to the success of this program. We believe that The “10 Keys”™ to Healthy Aging Instructor Manual will help communities to accomplish these goals.

This instructor manual will build upon your current knowledge and skills to strengthen and empower you to become coaches, advocates, and effective agents for health change.

As a result of leading this program, instructors will:

1. Empower others to see themselves as capable agents of their own change.

2. Share the philosophy of prevention and healthy aging.

3. Facilitate group or individual discussions.

4. Understand the importance of establishing goals as a vehicle to promote behavior change.

5. Believe that it is never too late for people to take better care of themselves.

6. Recognize that lifestyle and habits are responsible for the majority of preventable conditions.

7. Say without hesitation, “I don’t know, but I will find the answer and get back to you.”
INTRODUCTION

YOUR ROLE AS COACH & ADVOCATE

Being a Good Coach

Think for a moment about your role as a coach and advocate for your group. How you talk with individuals may enhance or diminish their motivation. Here are a few suggestions to keep in mind:

1. Meet the individual where he/she sees himself/herself
2. Focus on things the individual has control over
3. “Roll” with individual resistance; transform resistance into resolve
4. Facilitate individual self-efficacy, or “can do” spirit
How to Use the Prevention in Practice (PIP) Report

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 and to help them learn what they can do to lower their risk for disease. Review the Prevention In Practice (PIP) report with your participants.

The PIP is designed to involve adults in learning about their personal risk factors and identifying keys that require action. The PIP 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 sections in this guide.

<table>
<thead>
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A description of the key

The goal for each key. These goals are based upon the most recent scientific/medical information

Provides a brief statement or question to help individuals prepare to talk with their physicians

A check mark indicates that action is required

The order in which the keys are addressed is up to the instructor. The important point is to help each participant identify their most relevant keys.

Script: As a participant in the “10 Keys”™ program, you will have the opportunity to assess your own “10 Keys”™ areas. A complete PIP is on page i.9. You may want to take a copy of the PIP to share with your health care provider to discuss your specific goals.
BACKGROUND & TOOLS

There are many approaches to effectively guiding or coaching behavior change. In this section, we provide you with helpful information as a coach and advocate of behavior change within a group.

General Guidelines:

- Group Leader as Tour Guide
- Working With Groups

Behavior Change Strategies and Techniques:

- O.A.R.S.
- Readiness to Change Continuum
- Preparing for Behavior Change
- Making Health Goals
- Monitoring Behavior Change
One way to prepare to be successful when you talk to a group is to think about yourself as a health tour guide. Tour guides help people learn terminology, local customs, and meaningful things about a new place that will significantly enrich their lives and understanding. Any tour will go more smoothly if a guide 1) plans, 2) involves the audience, and 3) has an idea of what he/she wants to accomplish or what destination or outcome he/she has in mind.

Behavior change is a journey that involves developing new habits and customs. The destination is improved health. Your words will plant the seed in group members’ minds to begin their own journey, and the sooner they begin, the more likely their health will improve.

**Step 1 Planning**

As you prepare, think about:

1. Why are you meeting with this group?
2. What is it that you want to accomplish?
3. How well do you know this group?
4. Can you include humor?
5. Consider the time of day and environment.

**Step 2 Involvement**

Most audiences will pay more attention to you and what you say when you engage them in some way. Consider an activity, a story, or a few important facts that will get their attention. Note how changes in the room’s seating arrangement will influence group dynamics.

**Step 3 Outcome**

Focus on what you want to see happen after your discussion or presentation. What specific steps or actions will individuals take after they leave? Asking individuals to state or write out their plans or intentions are ways to commit them to action. This can be an effective closing.
Examples of what individuals could do as part of their plan:

1. Pick one key to work on.
2. List a specific action step. For example:
   - Schedule a colonoscopy.
   - Keep a record of their blood pressures.

Don’t be surprised to learn you will probably need to challenge your audience to consider taking some kind of an action step to better health. Most people listen to what you have to say, but your goal will be to encourage individuals to take the next important step, the step that requires that they decide to take responsibility to act on one key, or more keys, to healthy aging.

Every journey begins with a single step. As participants continue the program, they will find motivation to better care for themselves. Many people are “on the fence” or just not ready to change. Leaders prepare others to be open to change in the future. This preparation is key.

The schematic on the following page depicts this process.
Tour to Health

Planning
Why are you meeting with this group?
What do you hope to accomplish?

Involvement
How will you engage your audience?

Outcome
What will the individuals do after they leave?
When we teach others, our goal is to help them learn facts and to become more informed individuals. Being well informed, however, is not enough. We want to empower people to consider a behavior change, and when they are ready to change, to be successful.

We are responsible for our health. While health professionals and educators can inform about the risks associated with each of the “10 Keys”™, it is up to each of us to make the change. Our job as “10 Keys”™ instructors is to empower or motivate others to desire to be healthier and to take actions to improve their “10 Keys”™ health. Individuals who take steps for healthier living can often inspire others.

Helping participants commit to improving their health and that of their communities requires that they don’t just wish things in their communities were better, but that they consider taking actions to make them better. Examples may be that they encourage their places of worship or organizations to serve healthy snacks, or a local market to stock lower-salt products. Lessons for each key provide you with ideas and activities to help group members become advocates.

We recommend you use Page 2.6 as a way to facilitate conversation about advocacy and community connections. Consider making copies for individuals in your group.
You may not realize it, but most of you have important ties within your community, whether it is your place of worship, lunch group, walking group, or some other organizations to which you belong. List all of the organizations that you belong to, as well as other organizations that are in your community. You may also have family members, friends, or other individuals you could approach.

Where You Could Go

List organizations you belong to:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Other organizations in your community:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Individuals you could approach:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Having the opportunity to talk with others in a group is both a privilege and an honor. The best way to demonstrate this is by being prepared, punctual, and showing respect and value for each group member. Also, any way that you can demonstrate your commitment to healthy aging and your enthusiasm for being a leader is an added bonus.

There are additional qualities of a good group leader or facilitator that you will want to learn and practice. Most of us learn best from teaching others. Most learn more from teachers who model or practice the behaviors they encourage in others. Be a good role model!

**GROUP LEADER GUIDELINES**

1. Identify a timekeeper in the group. Know in advance how you plan to divide the time so you begin and end on time.
2. Be prepared and organized.
3. Speak clearly and loudly enough for all to hear.
4. Make sure that visual aids are large and easy to read.
5. Circulate around the room.
6. Consider asking participants to switch seating arrangements on occasion.
7. Keep the group on task.
8. Introduce and summarize each lesson.
9. Take time to review what each participant should do before the next session.
1. Tailor what and how you teach to your specific audience.

2. Incorporate laughter and humor.

3. Get participants to share by using open-ended questions or breaking into smaller groups on occasion.

4. Be positive and focus on what TO do rather than what NOT to do.

5. Get people engaged and talking, but guide the conversation to be supportive.

6. Hold all judgments. Participants may take what you say personally.

7. You don’t need to be an authority. If there are questions you can’t answer, tell them you don’t know but will find out.

8. Confidentiality — reinforce to program members that what is shared in class remains in class. Ask beforehand if anyone objects to sharing the class roster. Obtain their consent to be photographed or to share address information.

9. Build participants’ confidence.

10. Maintain high expectations of each participant.

11. Follow up with those who miss class.
BACKGROUND & TOOLS

WORKING WITH GROUPS

INTERPERSONAL, CARING STYLE

1. Express gratitude and positive reinforcement frequently and genuinely.
2. Be respectful and provide respectful answers to questions. Call individuals by the name they prefer to be called. Use name tags with large print.
3. People will continue to surprise and amaze you; so remain open minded and without judgment. Be aware of your assumptions.
4. Take the opportunity to follow up with individuals after class, as needed.
5. Look for early signs of disinterest, fatigue or confusion. Talk with the individuals away from class, one-on-one, or by telephone, if necessary.
6. Pay attention to attendance — while there are many reasons that keep people from attending class, check in with program members periodically to make certain that they are enjoying participating.

BEING PART OF A GROUP

It helps for group members to keep the following points in mind to make sure that everyone in the group enjoys and benefits from the experience. Discussions about the following may or may not be needed, depending upon the group. The instructor should use his/her discretion.

1. Encourage timely arrival and departure from all participants.
2. Ask the participant to contact the instructor if unable to attend a class.
3. Let everyone have a chance to share.
4. Affirm positive steps equally among all participants.
GROUP INTRODUCTIONS - KNOWING YOUR AUDIENCE

One important way to learn about the members in your group and for them to learn about one another is to engage them in an activity where they, in a few minutes, share something about themselves. This often helps you and group members to remember something unique or personal about each speaker. The key, for you as the instructor, is to monitor the time each person has to share and balance this with the group's interest in the content.

Timing is also important for when to begin introductions of group members. It is best to wait until latecomers are seated. When it looks like all are present, look for a break in what you are presenting to begin introductions.

As the instructor, you may find it useful to summarize on a flip chart or blackboard what you heard and/or to reinforce statements shared by the group. These statements can be reinforcing to you and group members as they can be unifying concepts that will strengthen group togetherness.
Instructor: Select one idea from this list to use to help the group get to know each other.

1. Share one reason why you decided to take this class.
2. Tell us about the healthiest person you know. What is it about that person’s personality, lifestyle, or history that makes him/her a role model?
3. Why is healthy aging important to you?
4. What have you enjoyed most about getting older?
5. What is the most valuable advice about your experiences of growing older that you could share with the youth of today?
6. How is aging different today from that of your parents or grandparents?
7. Pair off with the person on your right (or your left) and find out something unique or special about your partner and share this information with the group. Now reverse roles and do the same.
8. Which 3 words would describe you best?

__________________________________________________________

9. Write down 3 things about yourself, only one should be true. Have the group guess the one that is true.

__________________________________________________________

__________________________________________________________

10. Your idea for an “icebreaker”:

__________________________________________________________
One specific set of skills that will help you to become a more effective coach or counselor is best remembered by the acronym O.A.R.S. Think of yourself rowing along and using these four techniques. The more you use them, the more natural they will become.

Use the activity that follows to practice these skills.

**Use the O.A.R.S Approach:**

- **Open-ended questions** - allow you to get more information quickly
- **Affirmations** - positive statements to endorse or give approval to what was said
- **Reflective listening** - In a few words, you can restate or repeat what you heard and ask for clarification
- **Summary** - gives you an opportunity to review what was discussed

O.A.R.S.

BACKGROUND & TOOLS

CLIENT-CENTERED SKILLS DEVELOPMENT (CONT’D)

Examples:

1. Open-ended questions:
   - How can I help?
   - Tell me about your past successes.
   - How does smoking fit into your life?

2. Affirmations:
   - I appreciate your willingness to talk with your doctor.
   - That sounds like something that could make a huge difference for you!
   - That’s a great suggestion.

3. Reflective listening:
   - What I think I heard you say is … .
   - Correct me if I’m wrong … .
   - You seem to be frustrated.
   - You’re telling me you don’t think you need a flu shot.

4. Summary:
   - Tell me what you are going to do.
   - Let me know if I’ve missed anything.
   - This is an overview of what … .
As most of us have learned from our own experiences, changing a behavior is tough work. Why? The process of behavior change is complex and we are still learning about why people do what they do. We have also learned the most important things in life require effort. Behavior change is key to health improvements and can lead to enormous benefits including:

1. Improved quality of life.
2. Less disease and disability.
3. Better health for you and your community.

On a daily basis, this translates into more fun, greater independence, less sick time, and more time to enjoy the many gifts of life.

You may ask yourself “How can I motivate others to want to take better care of themselves when I find it difficult to change myself?” Don’t despair. You are human. You have had success and most likely some failure. We learn from both. Let’s focus on your successes.

Step back and think about a time in your life when you made a behavior change, and ask yourself a few questions. Your experiences with behavior change will be useful as you teach this process to others.

1. What motivated you?
2. How long did it take?
3. What setbacks did you face?
4. What did you do that was most helpful, least helpful?

Let’s begin by simplifying the process by focusing on three things:

2. Things that are within our control.
3. The Pros and Cons.

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Step-by-step, important behavior changes can be made. Remember it is what we do everyday that will make the biggest difference in our health. Research has informed us that our behaviors or habits at mid-life will predict our health in later life. But, before you think that it is too late, remember that we also know now that it is never too late to make healthy lifestyle changes. Encouraging participants to complete the Prevention In Practice (PIP) report and motivating them to pick one key to work on is an important step to improving health.

As you teach a class and/or talk to others, your ultimate goal is for individuals to leave committed to taking a positive step toward improving their health (maybe selecting one key to healthy aging to work on). You do not want to push, but rather, focus on the facts and strengthen their commitment by helping them believe that they will succeed. This is called “empowerment.” Helping others to be the best that they can be is one of the many bonuses you will reap from helping people make healthier choices, and hearing them report on how much better they feel.

Use the PIP to learn where others are and what keys to healthy aging they need to spend more time on.

Success in behavior change is more likely to occur when the focus is on factors that we can control or change. Examples of factors within our control include our attitude, our own behavior, and things in our immediate environment. Examples of behaviors we can control are what food we serve to others, when or what kind of exercise we do, whether we use our seat belt, or whether we get a flu shot.

Uncontrollable factors, or things that we can’t change, include our heredity and the weather. There is little benefit in focusing on what is outside our control. The good news is that much health improvement can occur from things within our control!
3) Pros and Cons

With most decisions in life, there are both good and bad things that we ponder before we make a change. Let’s begin with keeping things positive: the pros (or benefits). This does not mean ignoring the cons (sometimes called barriers). It is important, in advance, to help people weigh the benefits versus the barriers. This process is called decisional balance.

Decisional Balance

Decisional balance will help others to make a decision based on the good and the bad. If they do decide to change, this process has helped them become more committed to the change. Commitment is important to helping people sustain the motivation over time to continue making the behavior change a priority. Many find it useful to review the benefits, particularly when they feel that their motivation is fading. It is also useful to help remind us why we are doing what we are doing. Do keep your list of pros and cons within easy access. Making them public will strengthen and affirm why they want to make the effort to be healthier.

If others choose not to change, you have not failed. Just getting others to consider whether they want to change is an important step. Remember, people will change when they are ready and your efforts to respect their decision and support them are important steps in the process. Remain helpful but not judgmental. Understanding others is important. Your job is to listen, encourage, and when asked, or with permission, to give advice. Providing others with the information on the “10 Keys™” will enable them to reconsider change in the future. Your discussion with them is key to their empowerment.
Guidelines for Helping With Decision-Making

1. Failure to reach a decision to change is not a failed consultation.

2. Resolutions to change often break down. Make sure individuals understand this and do not avoid future contact if things go wrong.

3. Commitment to change is likely to fluctuate. Expect this to happen and empathize with the individual’s predicament.
Now that you have helped with identification of pros and cons, you are prepared to help strengthen individuals’ commitments. People usually need to go through several steps in this process. Some of these steps are done subconsciously, or may not be obvious to them. As you prepare people for change, make certain you have discussed each step.

1. Understand why the change is needed.
2. Accept that the change is important.
3. Decide that they want to make the change.

An action plan helps individuals make a behavior change. When individuals write out and state their plan publicly to you so they hear their own words, it is more likely to be a more useful guide. The “action steps” are short term goals.
1. Help others feel that the decision to take whatever action was their own. People don’t want to be told what to do. Most want to feel that they are in control.

“I respect that this may not be a good time. Can I call you in a month?”

2. Help others see that following the “10 Keys”™ is part of their value system to be healthy. You can help them make well thought-out, committed decisions.

“From what you told me, you value the fact that you are in good health for your age.”

3. People are more likely to act on what they hear themselves say, rather than by what “we” tell them.

“I think I heard you say … .”

4. It is normal that people are undecided or “on the fence” about what they want to do.

“It sounds as if you see both the good and the bad.”

5. You can help people compare the pros with the cons.

“What is one more positive thing that would tip the scale?”
6. The benefit that a person thinks s/he will receive or the risk or harm from not doing something is summarized for each key on the “handout.” You can use this handout to determine what the individual already knows and what his/her concerns are.

7. People need to believe that they can succeed. You can help by voicing your confidence in their ability to change.

   “I know that you can do it.”

8. Don’t underestimate your relationship with another person. Your ability to be caring, to listen, not to push, and to be empathetic will go far.

   “I’m glad that we had this time to talk. Thank you for sharing. What I believe you want me to do is to keep encouraging you by setting very small, reasonable steps that I know you can do.”

9. Be brief. “Less can be more!”

   “Can we take a few minutes to review your PIP and pick a few keys to work on?”

Researchers have learned that short discussions of only a few minutes that include a few brief actions steps can be very effective.
BACKGROUND & TOOLS

READINESS TO CHANGE CONTINUUM

KNOWLEDGE IS POWER

Why is it that people don’t practice healthy habits even though they know the habits are good for them? Many people understand that physical activity as well as eating plenty of fruits and vegetables, drinking in moderation, and not smoking are important behaviors.

People who suffer from certain chronic illnesses know how important it is to make lifestyle changes and to listen to their doctor.

Many people lack the knowledge of what they need to do, or fear failure. This is where you can help. When you provide the information about the “10 Keys”™, you reduce their fears by educating them, and then help them break down what they need to do into small steps. This process builds their confidence to succeed, because now they feel empowered.

Behavior Change Challenges

1. People want instant reward.

2. Change is hard work.

3. Change requires ongoing commitment and discipline.

4. Change must be sustained for ongoing health benefit.

5. People may not be ready when we want them to be.

6. People have difficulty seeing beyond past failures.

Source: Microsoft Office Online, Clipart: Wonder
You may have heard the phrase “stages of change.” This term is used because it describes the concept that being prepared or ready to change a behavior occurs in stages or steps. Another important accepted belief is that the individual who is considering a change is the one who actually determines when the change will occur. This decision, however, is often preceded by a series of “stages” or steps that lead up to this decision. Your job is to recognize what stage a person is in. You will want to tailor or vary what you say or do according to the stage of change.

For simplicity’s sake, let’s consider only three stages. This can be expanded as you become more familiar with the process.

**Stage 1:** Not ready to think about change at all at this time.

**Stage 2:** Considering change, but undecided.

**Stage 3:** Motivated and ready to change now.

As you work with groups, you will soon be able to recognize cues that indicate at what stage various participants are in. As you can imagine, the process goes forward and backwards. This means that our ability to make various changes can be interrupted when life events get in the way. When this happens, an old behavior pattern can reappear. This is called a “slip.” Slips are a normal part of life. Your role will be to help individuals learn from their “slips” and to see them as an opportunity to learn something new that will prepare them to do better in the future.
Both verbal and nonverbal cues are useful guidelines to help you determine a person’s readiness to change. The real skill is in taking your time to be sure that you know what stage a person is in. This is often hard to do. We might not have enough time to hear the whole story or listen to everyone. We may make assumptions. For example, because a person has high cholesterol we may assume that he or she wants to lower it.
Under each stage, list cues, verbs, or body language that inform you about the stage.

<table>
<thead>
<tr>
<th>Not Ready</th>
<th>Unsure</th>
<th>Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I love sugar too much to cut down.”</td>
<td>“I don’t know if I have the time.”</td>
<td>“Now that the weather is nice I am ready to get outside and walk.”</td>
</tr>
</tbody>
</table>

Those Who are Ready to Act or Change

At any one time only about one-third of the people we will see will be prepared to take action. These individuals are easy to motivate and it will be important for you to strengthen their commitment. Help these individuals to identify what key they want to work on and work out a plan of action. It can be very satisfying seeing these individuals achieve their goals, and to validate their efforts.
BACKGROUND & TOOLS

READINESS TO CHANGE CONTINUUM

What about Individuals Who are Unsure or Not Ready?

Don’t despair about the remaining two-thirds. You will learn how to gradually motivate these individuals to move from one stage to another. Each step in this process is progress. Never minimize how valuable you are in helping to move individuals along the continuum. Remember that those who give serious consideration to deciding when they are ready to initiate a change are often positively influencing others along their way.

DETERMINE AN INDIVIDUAL’S READINESS OR STAGE

Take a few minutes and think about what you could say or ask to determine someone’s readiness to change. Remember that few people will step forward and say, “I am ready to change.” Record some of your questions. Make sure that they are open-ended statements or ones that can’t be easily answered with a yes or no. Yes or no answers come along when we ask closed questions. Closed questions give us very little information. The goal is to ask questions that will generate much information and discussion.

__________________________________________________________________________________________________

__________________________________________________________________________________________________

__________________________________________________________________________________________________

__________________________________________________________________________________________________

__________________________________________________________________________________________________

__________________________________________________________________________________________________
BACKGROUND & TOOLS

PREPARING FOR BEHAVIOR CHANGE

THE “I CAN DO IT” SPIRIT

Your job as a coach/instructor is to develop in others an “I can do it” spirit. The relationship you have with others is key in developing this spirit!

People Who Don’t Think They Can:

1. Avoid tasks in that area.
2. Are more likely to give up before goals are accomplished.
3. Believe that tasks are harder than they actually are.
4. Plan poorly for tasks.
5. Feel a lot of stress when asked to perform tasks.
6. See failure only as a result of their own inabilities.

People Who Think They Can:

1. Are more willing to try tasks in that area.
2. Are more likely to try harder and longer.
3. See obstacles as challenges that can be beaten.
4. Are able to envision the possibility of success.
BACKGROUND & TOOLS

PREPARING FOR BEHAVIOR CHANGE

FOCUS ON HOW TO ENCOURAGE BEHAVIOR CHANGE

1. Consider your timing.
2. Ask permission to engage in a conversation.
3. Emphasize an individual’s choice.
4. Do not rush an individual into decision-making.
5. Present options for the future rather than a single course of action.
6. Describe what other individuals have done in a similar situation.
7. Emphasize that “you are the best judge of what will be best for you.”
8. Provide information in a neutral, non-personal manner.
MAKING HEALTH GOALS

Making a Step-By-Step Plan

“You’ve got to be careful if you don’t know where you are going, because you might not get there.” --Yogi Berra

The process of setting goals helps you choose where you want to go in life. If you know what you want to achieve, you can figure out what you need to do to get there. Setting goals can keep you focused in the right direction and guide you through the process of making a step-by-step plan.

Goals can be incredibly motivating and as you get into the habit of setting and achieving goals, you’ll find your self-confidence building fast. “Written goals have a way of transforming wishes into wants, can’ts into cans, dreams into plans, and plans into reality.” - Dan Zadra, (author of inspirational books)

When you set and meet goals, you:

1. Decide what is most important to you and focus on it.
2. Keep track of how you are improving your life.
3. Build your self-confidence to work on future goals.
4. Discover what you are able to do.
5. Take pride in your accomplishments.

Why else should you set goals?

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

What goals have you achieved that make you proud?

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
MAKING HEALTH GOALS

Your Workbook Has Important Worksheets

Each key in your Workbook involves an activity or worksheet to help an individual or a group of individuals learn about how to set goals and the action steps necessary to meet those goals. This is probably the most important handout or activity in the Workbook.

As you recall, the “10 Keys”™ to Healthy Aging effort has been designed with the ultimate goal of developing healthy communities, one small goal, step or key at a time. You are vital in this process.

Small, Stepwise Goals

As individuals reach small, healthier goals, they will be motivated to set even larger ones. Positive people who feel better about themselves are more likely to tell others about their success. This enthusiasm will provide momentum and the spirit necessary to advance health changes in the environment or changes in policy. This advocacy will, hopefully, create a demand for more preventative care, facilities, and activities in the community that will support individuals who want to take better care of themselves.

To Some, Setting Goals or Action Planning Seems Overwhelming

Even though goal setting may feel awkward at first, with experience and success, you will see how important it is to help others map out the plan or steps to success.
BACKGROUND & TOOLS

MAKING HEALTH GOALS

Have a Plan

“A goal without a plan is just a wish.”
-Antoine de Saint-Exuperg (author of The Little Prince)

Lifestyle changes are best accomplished when you have a plan. Writing down your plan and the steps you need to take are useful. Each step will take you closer to meeting your goal.

Set SMART Goals

When you write your goals, you will have a plan and your efforts will have a clearer direction. Each goal should be something you want and can achieve. Follow these guidelines to set SMART goals:

S = Specific
M = Measurable
A = Attainable
R = Realistic
T = Timely

BACKGROUND & TOOLS

MAKING HEALTH GOALS

SETTING SMART GOALS

Specific
Goals should be straightforward and emphasize what you want to happen. Specifics help you to focus your efforts and clearly define what you are going to do. Specific is What, Why and When of the SMART model.

WHAT are you going to do? Use action words such as increase, decrease, substitute, etc.

WHY is this important to do at this time? For example: Think about your health, lowering your blood pressure.

WHEN will I do it? Place reminders on your appointment calendar.

Measurable
Choose a goal you can measure. In this way, you can see the change occur. If you can’t measure it, you can’t manage it.

Attainable
A goal needs to be slightly out of reach so it takes some effort to achieve, but is possible.

Realistic
Realistic means “doable,” not “easy.” For instance, it is probably realistic to add a piece of fruit each day instead of trying to eat 6 each day all at once. Set the bar high enough for a satisfying achievement!

Timely
Set a timeframe for the goal. Setting a deadline on your goal gives you a clear target to work towards.

**BACKGROUND & TOOLS**

**MONITORING BEHAVIOR CHANGE**

**Checking Progress**

People do better when they see what they are doing is making a difference. Because many things affect our health, it is important to focus on observing the changes that are within our control.

“Shoot for the moon, even if you miss, you’ll land amongst the stars.”

-- Les Brown (motivational speaker)

**Encourage Rewards**

“Pat yourself on the back” from time to time. This is a simple reward that we often overlook. Learn to validate participants’ efforts.

Simple rewards will help:

1. Maintain motivation for continued progress.
2. Credit a job well done.
3. Discourage negative self-talk.
INSTRUCTOR PREPARATION

TRAINING AND IMPLEMENTATION

REQUIRED TRAINING

All instructors interested in leading a “10 Keys™ to Healthy Aging program are required to complete the free “10 Keys™ online educational module.

The certification can be found at this URL:

www12.edc.gsph.pitt.edu/CHA_OAEP/

Once completed, print out your certificate for your records.

IMPLEMENTATION OPTIONS

The “10 Keys™ to Healthy Aging program can be delivered in a variety of ways. For example, many instructors, after consultation with site administrators, deliver one Key a week in a 10 week program. Others have implemented it in two sessions of 5 Keys each time. It has also been delivered by asking participants to complete the PIP and then focusing on the 2 or 3 Keys that are most important to that group.

Be sure to make the implementation decision in collaboration with the site administrator(s), keeping in mind what would be the most effective delivery for the participants that come to your program.
**INSTRUCTOR PREPARATION**

**PRIOR TO PROGRAM START**

**1-3 MONTHS PRIOR TO PROGRAM START**

**Planning:** Communication is extremely important!

1. Call to arrange a meeting with the site/facility administrator (workplace, church, community organization, etc.).

2. Inform the site administrator about the “10 Keys”™ to Healthy Aging program and its benefits.

3. Make sure that the program plans (dates, times, location, site emergency management, etc.) are reviewed and agreed upon.

**Marketing:** A marketing campaign that is well planned will increase the probability of success.

1. Decide who will do the advertising (instructor or site/facility, where and when).

2. Discuss how the program will be advertised.

3. Flyers should include:
   - The “10 Keys”™ to Healthy Aging program description and registration information.
   - The day of the week and time that the program is offered.
   - The location of the program.
   - The registration instructions.
INSTRUCTOR PREPARATION

PRIOR TO PROGRAM START

1-3 MONTHS PRIOR TO PROGRAM START (CONTINUED)

Program Registration:
Inform individuals how to register by providing them with the phone number, the name of the location they can call, and a contact person who can be available to answer questions about the program.

Review Materials Ahead of Time for Class Instruction: Participants will listen and learn when the instructor is well organized and prepared.

Review all “10 Keys”™ lesson plans.

2 WEEKS PRIOR TO PROGRAM START

Contact the site administrator to obtain registration updates, if the site is assisting with registration.

1 WEEK PRIOR TO PROGRAM START

1. Contact the site administrator to obtain the final number of individuals registered for the class, if the site is assisting with registration.

2. Confirm the date/time/location.

3. Agree upon who should place reminder calls to registered participants.
“10 KEYS™ PROGRAM

FIRST SESSION

We suggest arriving 30 minutes before class and placing the Participant Workbooks, Attendance Sheet, PIPs, Pre-Program Quizzes and pencils invitingly on the table. Position yourself near the table so you can use this pre-class time to warmly meet and greet all who enter and encourage them to gather any materials they’ll need to start the program successfully. Establish a routine so the start of each session is predictable and participants know what to expect.

INSTRUCTOR INTRODUCTION SCRIPT

Script: Welcome and thank you for your interest in the “10 Keys”™ to Healthy Aging! (Introduce yourself and give a brief description of your interest in sharing the “10 Keys”™ information with others.) Let me take a moment to share my contact information with you. (Distribute information regarding your preferred method of contact and available hours.)

Script: I would like to take a moment to review a few items. (State location of restrooms, nearest exit, class end time or next meeting information.)

Script (Suggested guidelines): I ask that you stop at the Attendance Table as you enter each week to sign in and pick up any information sheets I have prepared for you.

Script: Before we get started with class, let’s take some time to introduce ourselves and get to know each other better. (Select from the list of “icebreakers” located on page 2.11 in the Working with Groups section.)

PRE– PROGRAM QUIZ

The quiz is included in the Supplemental Materials section of this workbook.

Script: One method of measuring how well I present the material to you is by having you answer the following questions. I will be giving you this quiz at the beginning of the program (today) and then again at the end of the program. (Hand out the pre-program quiz. Instructions should ask participants to write their name and date at the top of the form.)

Upon collection of the pre-program quiz, double check that each person’s name is written at the top of each exam.
“10 Keys™ Program

Program Materials

My Most Important Keys

My Most Important Keys worksheet is included in the Supplemental Material section of this manual.

Script: As we discuss each of the “10 Keys” you will see that some will take us more time than others because of the complexity of the content and its relevance to all of you. So that I may know which of the health behaviors are most important to you, I would like you to put a checkmark by the 3 that you are most interested in. There isn’t a space for your name because it isn’t necessary, but you can add it in if you prefer.
Direct your group’s attention to *The “10 Keys”™ to Healthy Aging Workbook*. The workbook should be given to all individuals who have enrolled in the class and is designed to enhance learning and to promote behavior change. This Workbook can also be found on the website: [www.caph.pitt.edu](http://www.caph.pitt.edu)

Please note that the Participant Workbook sections listed below are not in the Instructor Manual. “10 Keys”™ program materials included in the Instructor Manual are meant to help you with lesson planning.

**Script:** The Workbook sections are labeled 1-10. Each section represents a different Key. (Take this time to briefly describe the format of each chapter.)

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.

   Handouts for each key are also available online at [http://www12.edc.gsp.pitt.edu/CHA_OAEP/](http://www12.edc.gsp.pitt.edu/CHA_OAEP/).

2. **More Information About:** This section provides additional information that will help you to 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. These assignments may be discussed and shared in the next session to provide motivation for others to complete future assignments.

6. **Frequently Asked Questions:** This section summarizes questions and answers that provide more detail than the overview of the key.
## 10 KEYS™ PROGRAM

### PROGRAM MATERIALS

**THE PIP**

<table>
<thead>
<tr>
<th>Program</th>
<th>How to talk to your doctor about your health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Systolic Blood Pressure</td>
<td>Do you know your blood pressure? I need to lower my blood pressure.</td>
</tr>
<tr>
<td>Stop Smoking</td>
<td>I need help to stop smoking.</td>
</tr>
<tr>
<td>Participate In Cancer Screening</td>
<td>I need help to participate in cancer screening.</td>
</tr>
<tr>
<td>Get Immunized Regularly</td>
<td>I need vaccination.</td>
</tr>
<tr>
<td>Regulate Blood Glucose</td>
<td>I need help to regulate my blood glucose.</td>
</tr>
<tr>
<td>Lower LDL Cholesterol</td>
<td>I need help to lower my LDL cholesterol.</td>
</tr>
<tr>
<td>Be Physically Active</td>
<td>I need help to be physically active.</td>
</tr>
<tr>
<td>Maintain Social Contact</td>
<td>I need help to maintain social contact.</td>
</tr>
<tr>
<td>Combat Depression</td>
<td>I need help to combat depression.</td>
</tr>
</tbody>
</table>

### Center for Aging and Population Health Prevention Research Center Health

- **Lower Systolic Blood Pressure**
  - Under 140 mmHg (Best under 120 mmHg)
  - Know your number; check & record regularly

- **Stop Smoking**
  - No Tobacco Use

- **Participate In Cancer Screening**
  - Prostate Specific Antigen (PSA) (consulted by your physician)
  - Breast Cancer (women) - Mammogram (test every 2 years)
  - Cervical Cancer (women) - Pap test & pelvic exam (test every 1 - 5 years)
  - Colon Cancer - Colonoscopy (test every 10 years)

- **Get Immunized Regularly**
  - Flu shot (yearly)
  - Pneumonia Vaccine (one lifetime shot)

- **Regulate Blood Glucose**
  - Under 100 mg/dl fasting
  - Know your number, take action if necessary

- **Lower LDL Cholesterol**
  - Under 100 mg/dl
  - Know your number, take action if necessary

- **Be Physically Active**
  - Moderate activity at least 2 1/2 hours per week

- **Maintain Social Contact**
  - Participate in conversation or activities at least once a week

- **Combat Depression**
  - Maintain good mental health

### Prevention In Practice (PIP) Report-Guidelines for Adults Age 50 and Over

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Center for Aging and Population Health - Prevention Research Center
The final session of your program will have some extra steps, so you may want to shorten the length of time spent on the last Key (or Keys).

The PIP can be revisited at the end of each week or at the last session. Have the attendees look at the final column of each Key and place a check mark in the row or rows where they know they will need to spend more time on their healthy habits.

The Testimonial forms can be completed at any point in the program when a participant has noticed or spoken of a positive effect on their daily life. It’s a good idea to copy the blank form and carry it with you to class so you can explain it and give it to an individual when they first choose to share a personal account. Remind them that it will remain anonymous if ever shared outside of the program.

We recommend having participants complete the Feedback form on the final day of the program. It’s helpful to have clipboards or additional tables and seating to expedite completion.

You may want to consider making certificates for each of your program participants to honor their efforts in attending. Award each person when you call them to the front of the class, announcing their full name. Add grandeur with music or a nourishing covered dish celebration. Make it festive to encourage their accomplishments in moving towards healthier choices.

These materials are all in the Supplemental Materials section of this Manual.

**POST– PROGRAM QUIZ**

The quiz is included in the Supplemental Materials in this Manual.

*Script:* You took this same quiz at the beginning of the program. One method of measuring how well I presented the material to you is by asking you to answer the following questions again. *(Hand out the post-program quiz. Instructions should include asking participants to write their name and date at the top of the form.)*

*Upon collection of the post-program quiz, double check that each person’s name is written at the top of each exam. After the program is over, compare the pre- with the post-quiz for each person and see if each person was able to correctly answer more questions on the post-quiz than the pre-quiz.*
<table>
<thead>
<tr>
<th>Section Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key #1: Lower Systolic Blood Pressure</td>
<td>5.2</td>
</tr>
<tr>
<td>Key #2: Stop Smoking</td>
<td>5.6</td>
</tr>
<tr>
<td>Key #3: Participate in Cancer Screening</td>
<td>5.12</td>
</tr>
<tr>
<td>Key #4: Get Immunized Regularly</td>
<td>5.17</td>
</tr>
<tr>
<td>Key #5: Regulate Blood Glucose</td>
<td>5.22</td>
</tr>
<tr>
<td>Key #6: Lower LDL Cholesterol</td>
<td>5.26</td>
</tr>
<tr>
<td>Key #7: Be Physically Active</td>
<td>5.30</td>
</tr>
<tr>
<td>Key #8: Maintain Healthy Bones, Joints &amp; Muscles</td>
<td>5.34</td>
</tr>
<tr>
<td>Key #9: Maintain Social Contact</td>
<td>5.45</td>
</tr>
<tr>
<td>Key #10: Combat Depression</td>
<td>5.49</td>
</tr>
</tbody>
</table>
OVERVIEW

Hypertension is consistent high blood pressure, and a common and serious medi-
cal condition. The focus of this session is to discuss the importance of controlling
blood pressure. The instructor will emphasize the importance of knowing one’s
blood pressure number and learning what can be done to improve or lower it.
Participants will learn about controllable risk factors that lead to hypertension
(HTN), and that HTN is a risk factor for other conditions. They will also learn how
sodium affects blood pressure. The importance of sharing blood pressure read-
ings with their physicians is emphasized. The group will review the importance of
taking any blood pressure medication as prescribed and will discuss optimal
blood pressure levels. The instructor will have the opportunity to role-play a con-
versation with someone whose blood pressure is not well controlled.

SESSION TOPICS

1. Define hypertension.

2. Describe how to measure blood pressure.

3. Identify normal blood pressure.

4. Name the modifiable and non-modifiable risk factors for high blood pres-
sure.

5. Discuss how to talk with your physician about blood pressure.

6. Name action steps toward healthy lifestyle changes.
LESSON PLAN

KEY #1: LOWER SYSTOLIC BLOOD PRESSURE

Participant Objectives

1. Define systolic and diastolic blood pressure.

2. Know your blood pressure and whether action is required.

3. Identify optimal blood pressure levels.

4. Identify three action steps that will decrease blood pressure.

5. List action steps you will take if you need to lower your blood pressure.

Group Activities

1. Identify the sodium content in foods by reading labels.

2. Listen to heart sounds with a stethoscope (if available).

3. Identify arm diameter to determine proper blood pressure cuff size (if tape measures are available).

4. Locate radial pulse and measure for 15 seconds.

Assignment for Next Session

1. Identify community resources that measure blood pressure.

2. Practice discussing what you have learned with a family member or friend.

3. Look in your kitchen cupboard or take a trip to the grocery store. Report back to the group with four food items that you discovered were high in sodium.
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.

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.

High blood pressure is a serious condition requiring lifelong treatment. It is possible to lower blood pressure with lifestyle changes and medication.
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* that is low in saturated fat, includes five or more fruits and vegetables per day, and lower-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*

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.
LESSON PLAN

KEY #2: STOP SMOKING

Overview
This session reviews the physiological effects of smoking and secondhand smoke. The focus of this session is to acknowledge smoking as an addiction and to identify and support individuals and their loved ones who may be ready to quit smoking. Participants will learn to determine the stage of readiness that is necessary to begin the smoking cessation process. The instructor will guide participants to speak with their loved ones and to motivate themselves or other smokers to discuss their addiction with their physician. Instructors will share how to use local resources and the participants will identify other resources in their community.

Session Topics
1. Identify and support individuals who may be ready to stop smoking.
2. Learn about tips to quit smoking and to talk to others about quitting.
3. Identify local smoking cessation programs.
4. Identify action steps toward lifestyle changes.

Lesson Objectives
1. Identify and guide individuals to discuss smoking habits with their physicians.
2. Identify the benefits of quitting.
3. Learn quit smoking tips for yourself and others.
4. Identify local smoking cessation programs for those (including loved ones) who are ready to quit smoking.
LESSON PLAN

KEY #2 - STOP SMOKING

Group Activities

1. Role-play, “Are you ready?” Use the ruler to assist in determining the stage of readiness and ways to talk to people experiencing all stages. Please refer to the “10 Keys”™ to Healthy Aging Workbook, page 2.8.

2. Have participants pinch their nostrils and breathe through a straw. This simulates the sensation of chronic lung disease.

Assignment for Next Session

1. Identify two smoking cessation programs in your community.

2. If applicable, plan what to say to a loved one who smokes while keeping in mind the stages of readiness.

3. Talk to a friend or family member who is an ex-smoker about his/her cessation experience. Share highlights, particularly what was successful.
Stop Smoking

There are many different poisons that can be found in cigarettes, such as carbon monoxide, tar, rat poison, paint thinner, and lighter fluid, just to name a few. Any of these toxins, including those from secondhand smoke, can cause a great deal of damage to your body, including your heart, lungs, kidneys, and other organs.

Benefits to Quitting

- Better breathing
- Less coughing
- Increased energy
- Improved sex drive
- Reduction in some medications
- Improved taste and smell
- Set a better example for others
- Avoid exposing those around you to secondhand smoke
- Save money
- Smell better! Your breath, hair, and clothes will stop smelling like smoke

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.
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
1. Work to make participants feel comfortable and ready to share their views without passing judgment

2. Talk to each person with respect, regardless of smoking status and readiness

3. Be aware that this is a sensitive subject for everyone and encourage everyone to be sensitive to each other

4. Be aware that not every person is ready to quit

5. Recognize that quitting is difficult and explain to the group so they understand as well

6. Make gentle suggestions for those wishing to quit or trying to encourage loved ones to quit
   - Suggest talking points such as health benefits and effects on family members
   - Recognize that many people take multiple attempts to quit
   - Remind participants that many people have had success quitting despite the difficulty

7. If appropriate, suggest support groups between participants

Be Informed

More Resources to Share

Below are some helpful resources to share with your participants:

- For Women: http://women.smokefree.gov/
- Quit Smoking Phone Application: http://smokefree.gov/apps-quitstart
- Smoking Cessation products:
  http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm198176.htm
- Free Quit Plan: http://www.becomeanex.org/
- American Cancer Society: http://www.cancer.org/healthy/stayawayfromtobacco/guidetoquittingsmoking/index
LESSON PLAN
KEY #3: PARTICIPATE IN CANCER SCREENING

Overview
The focus of this session is to discuss the importance of regular preventative cancer screening. Cancer is one of the leading causes of death among Americans. The participants will learn that early detection of cancer will increase the chance of survival. Early detection and screening are important to maintain a good quality of life. Participants will learn the recommended screening guidelines that have been developed to detect certain cancers. These screenings include: mammogram, breast exam, fecal occult blood test, sigmoidoscopy, colonoscopy, Pap test, pelvic exam, digital rectal exam, prostate specific antigen, skin exam, and oral exam.

Session Topics
1. Define cancer.
2. Describe why prevention and early detection are key.
3. List some common symptoms of cancer.
4. Identify the recommended screenings and how often you should have them.
5. Discuss action steps toward lifestyle changes.

Participant Objectives
1. Define cancer.
2. Describe how early detection of cancer leads to a better quality of life.
3. Describe recommended screenings and screening frequency.
4. Refer individual to discuss unusual signs and symptoms with physician.
LESSON PLAN

KEY #3: PARTICIPATE IN CANCER SCREENING

Participant Objectives (Cont’d)

5. Recognize the symptoms that may indicate that a physician referral is necessary.

6. Describe how nutrition, exercise and other behavioral factors contribute to a healthy lifestyle.

7. Determine whether an individual needs to schedule a cancer screening.

8. Develop an action plan that includes either contacting a doctor or scheduling a procedure.

Group Activities

1. View a colonoscopy video (if available).

2. Practice explaining the need for preventative screening to a fellow participant.

Assignment for Next Session

1. Write down all of the screenings that you have had and include the dates.

2. Interview one friend or family member about the need for preventative screening. Please comment about the interview.
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 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.

Many Cancers Have Warning Signs

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

Take Action Prevent or Detect Cancer Early

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.                                                                                                                                                                                                                                                                                           |
LESSON PLAN

KEY #4: GET IMMUNIZED REGULARLY

Overview

The focus of this session is to discuss the important role that immunizations play in the prevention of disease. The participants will learn some basic facts about influenza and pneumonia, the frequency of immunizations, the value of record keeping, and the importance of good hand washing techniques.

Session Topics

1. Describe important facts about immunizations.
2. Explain the importance of keeping a health record.
3. Define vaccine.
4. Barriers and solutions to immunizations.
5. Action steps toward lifestyle changes.

Participant Objectives

1. Explain the term vaccine.
2. Identify the ages and frequencies at which immunizations should be administered.
3. Ask the participants whether they need to schedule an immunization and when they will have this completed.
LESSON PLAN

KEY #4: GET IMMUNIZED REGULARLY

Group Activities

1. Discuss and dispel common myths about vaccinations.
2. Talk about memories of being immunized as children.

Assignment for Next Session

Write down all of the immunizations that you have had and the dates you received the immunizations.
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.
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.

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumococcal Disease</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>Influenza</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, Diphtheria, 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
LESSON PLAN
KEY #5: REGULATE BLOOD GLUCOSE

Overview
The focus of this session is to understand the importance of knowing your blood glucose number and of obtaining a yearly medical exam to assess for the early detection of diabetes. The participants will understand the definition of pre-diabetes and diabetes and will know the actions necessary to lower the risk of developing diabetes and to prevent the complications of elevated blood glucose.

Session Topics
1. Define blood glucose and diabetes.
2. Describe the types of diabetes.
3. List action steps to prevent diabetes.
4. Name the testing available to diagnose pre-diabetes and diabetes.
5. Discuss preventative care that is available for individuals with diabetes.

Participant Objectives
1. Explain the term blood glucose, pre-diabetes and diabetes.
2. Understand when an individual needs to be tested for diabetes.
3. Identify a normal fasting blood glucose level.
4. Identify three action steps to prevent diabetes.
5. Define whether the individual needs to be tested for diabetes and/or needs an action plan to control his/her blood glucose level.
GROUP ACTIVITIES

1. Describe the actions of the pancreas and of insulin in the body. Use page 5.4 of the Workbook as a reference.

2. Describe examples of normal portion size.

3. Discuss experiences of what participants have learned from individuals with diabetes and its complications.

ASSIGNMENT FOR NEXT SESSION

1. Identify your last blood glucose reading.

2. List four action steps that you can take to prevent type 2 diabetes.
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.

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.
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 130 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
LESSON PLAN

KEY #6: LOWER LDL CHOLESTEROL

Overview

The focus of the session is to learn that LDL cholesterol is a major contributor to heart disease. It will be important to emphasize that because heart disease caused by plaque build-up in the arteries (commonly called “thickening of arteries”) develops over a lifetime, many individuals will require a cholesterol lowering medication in addition to dietary changes to get their LDL level to less than 100 mg/dl. Participants will learn about the different types of fat and how they affect cholesterol levels. The participants will learn that the body makes all of the cholesterol that it needs. Heredity determines how fast LDL is made by the body and how quickly it is removed from the bloodstream. Reading labels and tips to lower fat and cholesterol intake will also be discussed.

Session Topics

1. Define LDL cholesterol.
2. Identify healthy LDL cholesterol levels.
3. Describe the three major components in total cholesterol.
4. Discuss healthy eating.
5. List action steps on how to lower your LDL cholesterol.
LESSON PLAN

KEY #6: LOWER LDL CHOLESTEROL

Participant Objectives

1. Identify healthy LDL and HDL cholesterol, and triglyceride levels.
2. Identify three food items high in saturated fat.
3. Identify portion sizes.
4. Determine whether participants should take action to lower their LDL levels and whether a medication is needed.
5. List 4 action steps that participants can take to lower their LDL cholesterol.

Group Activities

1. Review the Workbook, page 6.4, dedicated to saturated fat on food labels.
2. Plan a healthy meal.

Assignment for Next Session

1. Look in your kitchen for foods with more than 5 grams of saturated fat.
2. List changes you can make in your diet to eat less saturated fat.
Key #6  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>100 mg/dl</th>
<th>130 mg/dl</th>
<th>160 mg/dl</th>
<th>190 mg/dl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal (Best)</td>
<td>Near Optimal</td>
<td>Borderline</td>
<td>High</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.
Overview

The focus of this session is to discuss the importance of regular physical activity. Participants will understand that physical activity can be fun and should be a part of everyday life. Participants will learn to recognize their own levels of physical activity. Through interactive group activities and home assignments, participants will learn about motivational techniques that can be helpful in overcoming some common barriers to exercise.

Session Topics

1. Describe what is meant by regular physical activity.
2. Describe how to exercise safely.
3. Evaluate current activity levels and identify activity goals.
4. Identify common barriers to activity.
5. Review the value of recording activity.

Participant Objectives

1. Describe what is meant by regular physical activity.
2. List 3 benefits of exercise.
3. Identify current physical activity level and physical activity goals.
4. Name action responses to the frequent barriers to physical activity.
5. Determine whether the participant needs more activity.
6. Identify action steps for getting started.
LESSON PLAN

KEY #7: BE PHYSICALLY ACTIVE

Group Activities

1. Discuss present level of physical activity.

2. Identify and share a short term goal to enhance the present activity level.

3. Role-play “active responses” to the common physical activity barriers (optional).

Assignment for Next Session

1. Create a list of physical activities that meet the following categories:
   Strength, Endurance, Balance and Flexibility. There is additional information about strength training in Key 8.

2. Write a brief (10-minute) daily physical activity routine.

3. Once you have committed to the 10-minute plan, write a plan to maintain the activity.

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.
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.

Source: ©Microsoft Office Online, Clip Art, Notebook
LESSON PLAN

KEY #8: MAINTAIN HEALTHY BONES, JOINTS & MUSCLES

Overview
The focus of this session is to discuss the importance of healthy bones, joints and muscles in the body. This section differs from the others in that it consists of three distinct subsections (8a. Bones; 8b. Joints; 8c. Muscles).

Visual aides assist in demonstrating bone anatomy and bone remodeling. The participant will learn that it is never too late to start promoting good bone, joint and muscle health. The group will learn the definition of osteopenia, osteoporosis, osteoarthritis and sarcopenia (age-related muscle weakness). Participants will learn about the importance of calcium, vitamin D and physical activity to maintain bone, joint and muscle health.

Research has shown that strengthening exercises are both safe and effective for women and men of all ages. The benefits of strength and resistance training and the prevention of falls will be discussed.

Session Topics
1. Define and identify risk factors for osteopenia, osteoporosis, osteoarthritis, and sarcopenia (age-related muscle weakness).
2. Define the purpose of bone density screening and the FRAX® test.
3. Identify nutrients involved in bone and joint health.
4. Describe the benefits of resistance and weight training for healthy bones, joints and muscles.
5. Describe measures to prevent falls.

Participant Objectives
1. Identify the importance of a bone density test and FRAX® test.
2. Learn about the importance of calcium, vitamin D, and physical activity.
3. List action steps that you can take to maintain bone, joint and muscle health.
4. List action steps to prevent falls in your home.
LESSON PLAN

KEY #8: PREVENT BONE LOSS & MUSCLE WEAKNESS

Group Activities

1. Discuss how preventing bone loss and muscle weakness can impact the other keys to healthy aging.
2. Small group planning of daily nutritional needs and muscle strengthening needs.

Assignment for Next Session

1. Look in your kitchen and identify foods that are high in calcium and vitamin D.
2. Walk through your home, room-to-room, and identify fall and injury risks.
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.

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.
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

Normal Bone  Osteoporotic Bone

Picture courtesy of the International Osteoporosis Foundation, 2007
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.

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.

---

**Be Informed**

**More Information About Bones**

**Information**

**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**

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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. in the Workbook.)

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

**8b: What is Osteoarthritis?**

Osteoarthritis 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

Picture courtesy of the American College of Rheumatology, Rheumatology Image Bank.
Take Action

Keep Your Bones, Joints & Muscles Healthy

Prevent Osteoarthritis

The causes of osteoarthritis are not well understood, but certain factors increase your risk, 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.
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.

**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*
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 the 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 dumbbells
- 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 more dense 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
**Lesson Plan**

**Key #9: Maintain Social Contact**

**Overview**

The focus of this session is to discuss the importance of remaining socially active and to review methods to maintain social contact. The participant will learn to tailor programs and opportunities to meet the needs of individuals within the community.

**Session Topics**

1. Benefits of social contact.
2. Mental decline definitions.
3. Tips to maintain social contact.
4. Local programs and recreational activities.

**Participant Objectives**

1. Identify health benefits of remaining socially active.
2. Define mild cognitive impairment, dementia and Alzheimer’s Disease.
3. List tips to maintain social contact.
LESSON PLAN

KEY #9: MAINTAIN SOCIAL CONTACT

Group Activities

1. Role-play a discussion about how to connect with others.
2. Identify characteristics of social isolation.
3. Open group discussion regarding methods to increase contact with others.

Assignment for Next Session

1. Name 3 resources in the community that provide social opportunities.
2. Interview a family member or friend who is socially isolated. What would you suggest to a person whom you know is socially isolated?
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)
Overview

Depression is a common and serious mental health problem. Depression is an illness. It is described as sadness or a low mood, but, unfortunately, the problem is much greater. Depression is not a normal part of aging. Participants will learn to recognize the symptoms of depression and to guide individuals to a doctor for an evaluation. Participants will also identify helpful evaluation resources within their communities. The participants will become comfortable in discussing barriers for seeking help -- embarrassment, cost, etc.—by role-playing with fellow participants.

Session Topics

1. Define depression.
2. List causes and symptoms of depression.
3. What actions to combat depression may be necessary?
4. How to discuss your feelings with your doctor.

Participant Objectives

1. Identify symptoms of depression.
2. Know when and how to suggest help.
### LESSON PLAN

#### KEY #10: COMBAT DEPRESSION

**Group Activities**

1. Group discussion about how isolation affects people close to you and how you can reach out to them.

2. Discuss how to cope with negative implications associated with depression and other mental health issues.

3. Discuss how depression can influence the other “10 Keys”™ to Healthy Aging.

**Assignment for Next Session**

1. Identify your own feelings and see if you have symptoms of depression by taking the Geriatric Depression Scale on page 10.5 in the *Workbook*. Discuss your results with your doctor.

2. Contact a trusted health care provider and obtain the name of a local psychiatrist or psychologist and be prepared to share the name during the session.
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)
Take Action
Maintain Good Mental Health

If you have experienced any of the 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.
SUPPLEMENTAL MATERIALS

EXPLANATION OF SUPPLEMENTAL MATERIALS

The following supplemental materials are optional and can be used in implementing a “10 Keys”™ program:

◊ **Attendance**: If attendance is important to you or to your facility, make sure the attendance sheet is in the same place every session. Establish a good routine by reminding all participants to sign in when they enter the room.

◊ **Quiz**: Some groups choose to use the pre- and post-quiz as an evaluation of the program, to see if the group gained knowledge over the course of the “10 Keys”™. Be sure to circle “Pre” or “Post” so you can compare them later. To facilitate comparison, ask participants to write their name. Answers to the quiz are provided in this manual, to be reviewed in a group or handed out to participants.

◊ **My Most Important Keys**: This form can be distributed and filled out anonymously by your group to give you information about which of the “10 Keys”™ are the ones your participants are most interested in.

◊ **Testimonial**: Testimonials can be a powerful way to capture the impact of the program on participants. They can be given out any time someone mentions or reports a positive effect on their health or life.

◊ **Feedback**: These forms should be anonymous and are another way to evaluate the program. They are usually distributed on the last day of the program.

◊ **Certificate**: You can choose to give each participant a certificate at the end of the program. Some groups choose to make a celebration out of this, honoring the commitment by the participants, and providing healthy snacks. Perhaps you can call them to the front and congratulate them individually on their efforts.

◊ **“10 Keys”™ Highlights**: These were created in 2012 as a summary of each key and for an alternate way to determine if the group has learned the information in each Key. Answers are provided to be reviewed in the group setting.
# ATTENDANCE

Page _______ of ________

Class Location Zip Code: __________________________ Check the box ☑ if you are present!

Instructor: __________________________________________ Months/Year(s): __________________________

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Center for Aging and Population Health - Prevention Research Center
“10 Keys”™ to Healthy Aging Quiz

Circle one:  PRE-Program  POST-Program

Name ________________________________  Date ______

Choose one:  Male  Female  Age (in years) __________

Choose one race:  White alone  Black or African American alone  Asian Alone  
American Indian and/or Alaskan Native alone  Native Hawaiian and/or other Pacific Islander alone  
Some other race alone  Two or more races

Choose one ethnicity:  Hispanic or Latino  Not Hispanic or Latino

1) What is the minimum number of hours of regular physical activity an older adult should get per week? Circle One
   1) 6 hours
   2) 1 hours
   3) 5 hours
   4) 2½ hours

2) What is a normal blood pressure level? Circle One
   1) 1160/90 mmHg
   2) 120/80 mmHg
   3) 150/85 mmHg
   4) 142/72 mmHg

3) What is the preferred LDL cholesterol level? Circle One
   1) Less than 130 mg/dL
   2) Less than 200 mg/dL
   3) Less than 100 mg/dL
   4) Less than 150 mg/dL

4) How much calcium does someone age 71 and older need each day? Circle One
   1) 800-1,000 mg
   2) 1,200 mg
   3) 1,500-1,800 mg

--TURN TO NEXT PAGE--
5) Every ____ year(s), all adults 50+ should have a colonoscopy unless they are at higher risk.  **Fill in the blank with a number**

6) Every ____ year(s), all women 50-74 should have a mammogram. **Fill in the blank with a number**

7) Smoking is an addiction.  True  or  False  **Circle One**

8) What is the optimal fasting blood glucose level for older adults, with or without diabetes?  **Circle One**
   1) Less than 100 mg/dL
   2) Less than 90 mg/dL
   3) Less than 120 mg/dL
   4) Less than 150 mg/dL

9) Who (among people > 65 years old) should receive a pneumonia immunization?  **Circle One**
   1) Healthy people
   2) Smokers
   3) Cancer patients
   4) All of the above

10) Who should receive an annual flu shot?  **Choose all that apply**
   1) Adults over age 50
   2) Anyone with a chronic disease or weak immune system
   3) Children 6 months and older
   4) All of the above

11) List 2 ways someone could maintain social contact.
   ________________________________________________
   ________________________________________________

12) Depression is a normal part of aging.  True  or  False  **Circle One**

13) People with osteoarthritis should avoid all physical activity in order to protect their joints.
    True  or  False  **Circle One**

14) Both men and women need to be concerned about bone loss as they age.  True  or  False  **Circle One**
Answer Key to “10 Keys”™ to Healthy Aging Quiz

1. 2 1/2 hours
2. 120/80 mmHg
3. Less than 100 mg/dL
4. 1,200 mg
5. 10 years
6. 2 years
7. True
8. Less than 100 mg/dL
9. All of the above
10. All of the above
11. Many possibilities, such as: volunteer, join a health club, book club, bicycle group or some other group, join organizations, travel with others
12. False
13. False
14. True
Put a checkmark ✓ next to the 3 Keys that are most important in your life:

- Lower systolic blood pressure
- Stop smoking
- Participate in cancer screening
- Get immunized regularly
- Regulate blood glucose
- Lower LDL cholesterol
- Be physically active
- Maintain healthy bones, joints, and muscles
- Maintain social contact
- Combat depression
"10 Keys"™ Testimonial
How did the program make a positive impact on your health behaviors and/or in your life?

________________________________________________________________________
________________________________________________________________________
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________________________________________________________________________
________________________________________________________________________

THANK YOU!
If we ever use your testimonial to share the impact of our program, we will not use your name.

Name: __________________________

Program site: ______________________

I give permission to publicize my comments.

Signature: ________________________ Date: ______

Name: ________________________
Participant Feedback

“10 Keys”™ to Healthy Aging

Date: ____________________                  Location: ____________________

Do not put your name on this sheet! This is anonymous feedback!

Please use the scale below to respond to the following statements.

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

1. I am confident I can name the “10 Keys”™ to Healthy Aging. 1 2 3 4 5
2. I am confident I understand the “10 Keys”™ to Healthy Aging. 1 2 3 4 5
3. I am confident I can relate the “10 Keys”™ to Healthy Aging to my own health. 1 2 3 4 5
4. I am motivated to live a healthier lifestyle as a result of participating in this program. 1 2 3 4 5
5. The Prevention in Practice report was easy to use. 1 2 3 4 5
6. After completing the Prevention in Practice report, I understand which of the “10 Keys”™ I need to work on. 1 2 3 4 5
7. The instructor/presenter clearly explained the “10 Keys”™. 1 2 3 4 5
8. The instructor/presenter was enthusiastic. 1 2 3 4 5
9. The instructor/presenter encouraged discussion and questions. 1 2 3 4 5
10. I would recommend this program to others. 1 2 3 4 5

What did you like about the program? ____________________________________________
_______________________________________________________________
_______________________________________________________________

What aspects of the program could be improved? ___________________________
_______________________________________________________________
_______________________________________________________________
The Certificate of Completion can be awarded to all participants who have completed a “10 Keys”™ to Healthy Aging program.

Certificate of Completion

is hereby granted to

Place Name Here

to acknowledge that he/she has completed the Program:

“10 Keys”™ to Healthy Aging

Granted: Insert Date Here
Key 1 – Lower systolic blood pressure

Hypertension (a blood pressure of more than 120/80 mm Hg) is a very common condition among older adults. Uncontrolled hypertension is a serious condition which can result in multiple complications, disability and death. Fortunately, it is possible to maintain normal blood pressure with medication and lifestyle changes.

Some facts about Hypertension

What makes you get it?
- Obesity
- High-sodium Diet
- Inactivity
- Tobacco Use
- Drinking Alcohol
- Age
- Race
- Heredity

What can it cause?
- Heart Attack
- Stroke
- Age-Related Dementia
- Memory Loss
- Kidney Failure
- Congestive Heart Failure

What can you do?
- Monitor your blood pressure
- Discuss with your doctor
- Take your medication
- Modify your lifestyle
  - Maintain a healthy weight
  - Be physically active
  - Reduce sodium in your diet
  - Follow a heart healthy eating plan
  - Drink alcohol in moderation
  - Stop smoking or using tobacco

Case study for group discussion

John, 72 years old, is active and energetic. Yesterday, he was dancing at a party when he fell down. He was taken to the emergency room where his blood pressure reading showed 170/110. Fortunately, he was not found to have any other illnesses. John last met his PCP 6 months back.

1. Why was John unaware of his high blood pressure?
2. Could John have avoided what happened related to his blood pressure?
3. What is a normal blood pressure?
4. If you were John’s friend, what suggestions would you give John regarding his diet which would help him get his blood pressure under control, along with the medication prescribed by his doctor?
Key - 2 Stop smoking

Smoking is an addiction which increases your risk for several serious diseases. A smoker can find it difficult to quit due to withdrawal symptoms but with the help of medication and counseling, it can be done. Several government and community agencies provide smoking cessation programs to aid smokers to quit. Stopping smoking can be beneficial at any age and the body is able to repair the damages even after forty or fifty years of smoking.

Some facts about smoking

<table>
<thead>
<tr>
<th>What can it cause?</th>
<th>How can you quit smoking? (START!)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Coronary Heart Disease</td>
<td>S et a quit date</td>
</tr>
<tr>
<td>• Stroke</td>
<td>T ell family, friends and coworkers that you plan to quit</td>
</tr>
<tr>
<td>• Cancer</td>
<td>A nticipate and plan for the challenges</td>
</tr>
<tr>
<td>• Decreased Bone Density</td>
<td>R emove tobacco products from your home, car and work</td>
</tr>
<tr>
<td>• Stroke</td>
<td>T alk to your doctor about getting help to quit</td>
</tr>
<tr>
<td>• Throat and mouth disease</td>
<td></td>
</tr>
<tr>
<td>• Bronchitis</td>
<td></td>
</tr>
<tr>
<td>• Hypertension</td>
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</tbody>
</table>

Case study for group discussion

Betty, an RN, is 68 and has been a smoker for the past 20 years. She felt that she needed to smoke to relieve the stress of her job. For the last 2 months she has been experiencing a persistent dry cough and a feeling of breathlessness. She suspects that she is beginning to have a “touch of bronchitis”. She knows that her smoking is responsible for her symptoms and wants to quit. She wonders whether she will be able to do so.

1. Do you think Betty will be able to quit smoking?
2. Do you think quitting will be beneficial for her, now that she has been smoking for 20 years and has probably already developed damage to her lungs? Why or why not?
3. What other diseases do you think Betty is at risk for if she continues to smoke?
4. What suggestions could you give Betty to help her quit smoking?
Key 3 - Participate in cancer screening

Cancers are a group of diseases where abnormal cells divide without control and can invade surrounding tissue. Screening procedures for cancer can be uncomfortable but they help in the early identification of cancer. When a cancer is identified early, there is a greater chance that it can be treated successfully. Screening procedures currently available include those for skin, colon, rectum, prostate, breast and cervical cancer.

Some facts about cancer

<table>
<thead>
<tr>
<th>Warning signs of cancer</th>
<th>How to prevent cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in bowel or bladder habits</td>
<td>• Meet your doctor for cancer screening</td>
</tr>
<tr>
<td>A sore that does not heal</td>
<td>• Overcome your fear of screening</td>
</tr>
<tr>
<td>Unusual bleeding or discharge</td>
<td>• Do not use tobacco products</td>
</tr>
<tr>
<td>Thickening or a lump in any part of the body</td>
<td>• Be physically active</td>
</tr>
<tr>
<td>Indigestion or difficulty swallowing</td>
<td>• Choose foods with less animal fat and more fiber</td>
</tr>
<tr>
<td>Obvious, recent change in a wart or a mole</td>
<td>• Use sunscreen and avoid tanning booths</td>
</tr>
<tr>
<td>Nagging cough or hoarseness</td>
<td>• Drink less alcohol</td>
</tr>
<tr>
<td>White patches inside the mouth or white spots on the tongue</td>
<td></td>
</tr>
</tbody>
</table>

Case study for group discussion

Mary and Bob, a married couple, are in their sixties. In the last couple of months, Mary’s sister was diagnosed with breast cancer and Bob’s tennis partner was diagnosed with colon cancer. Both of them have, therefore, become concerned about the possibility of cancer. Bob smokes and has been trying to quit for the past several months.

1. Is Mary at risk for getting breast cancer? Why or why not?
2. Is Bob at risk for getting cancer? Why or why not?
3. What are the steps this couple can take to reduce their risk of cancer?
Key 4 – Get Immunized regularly

Vaccines contain weakened or killed microorganisms which stimulate the body to produce antibodies against that specific organism. If you are subsequently infected with that microorganism, these antibodies attack and protect your body against disease. Keep a personal record of your immunizations so that you can schedule them at appropriate intervals with your doctor’s help.

Recommended immunizations for adults over 50

<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-If at Risk                | Requires two doses, 6-12 months apart.                                         |
| Hepatitis B-If at Risk                | 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. |

Case study for group discussion

Jim is 85 and comes regularly to the senior center. Last year, he got a flu shot for the first time. A week following his flu shot, Jim developed fever and cough and was unwell for several days. This year, Jim has told his friends at the senior center that he has no intention to go for a flu shot because he does not believe that it prevents the flu.

1. Why did Jim get the ‘flu’ though he took the flu shot?
2. Did the flu shot help him at all?
3. Why is it important that Jim gets the flu shot every year?
4. What puts Jim at a greater risk of developing complications if he gets the flu?
The “10 Keys”™ to Healthy Aging

Key 5 HIGHLIGHT

Key 5 – Regulate Blood Glucose

Type 2 Diabetes is a chronic disease in which the body does not produce adequate insulin and/or is not able to use it properly. As a result, glucose builds up in the blood and causes damage to organs in the body including the heart, kidney, eyes and nerves. The normal fasting blood glucose level is below 100mg/dl. A person with pre-diabetes has a fasting blood glucose level between 100 and 126 mg/dl. Pre-diabetics are at an increased risk for developing diabetes but can prevent or delay its onset by losing body weight and exercising. A fasting blood glucose level of more than or equal to 126 mg/dl indicates diabetes.

Some facts about diabetes

<table>
<thead>
<tr>
<th>What increases your risk for getting it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Overweight or Obesity</td>
</tr>
<tr>
<td>• Lack of Exercise</td>
</tr>
<tr>
<td>• Age</td>
</tr>
<tr>
<td>• Race</td>
</tr>
<tr>
<td>• Alcohol Abuse</td>
</tr>
<tr>
<td>• Family History</td>
</tr>
<tr>
<td>• Ever having a baby that weighed over 9 lbs at birth</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What symptoms does it cause?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Excessive thirst</td>
</tr>
<tr>
<td>• Frequent urination</td>
</tr>
<tr>
<td>• Weight loss</td>
</tr>
<tr>
<td>• Fatigue</td>
</tr>
<tr>
<td>• Skin infections</td>
</tr>
<tr>
<td>• Slow-healing cuts/bruises</td>
</tr>
<tr>
<td>• Blurred vision</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What you can do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improve your risk factors</td>
</tr>
<tr>
<td>• Keep your systolic blood pressure under 120 mmHg</td>
</tr>
<tr>
<td>• Keep your LDL cholesterol under 100 mg/dl</td>
</tr>
<tr>
<td>• Control your blood glucose</td>
</tr>
<tr>
<td>- Know your A1C goal</td>
</tr>
<tr>
<td>- Stay hydrated</td>
</tr>
<tr>
<td>- Follow regular habits of sleep, exercise and diet</td>
</tr>
<tr>
<td>- Follow prescribed drug treatment</td>
</tr>
<tr>
<td>- Eat properly to avoid low blood glucose</td>
</tr>
</tbody>
</table>

Case study for group discussion

Nancy, 67, is obese and does not exercise regularly. Last week, during a routine health check, she was informed that her fasting blood glucose was 112 mg/dl and was advised to exercise and lose weight. Nancy was reminded how her sister had to have her big toe amputated due to diabetes. She has decided to make concerted efforts to prevent diabetes.

1. What condition does Nancy have, with regard to her blood glucose?
2. What risk factors does Nancy have for developing diabetes?
3. How can Nancy modify her lifestyle to prevent the onset of diabetes?
4. Nancy is 5 feet 4 inches tall. What is her healthy weight?
Key 6 – Lower LDL cholesterol

Cholesterol is a fat like substance in the blood which builds up in the walls of arteries and causes them to narrow, reducing the blood flow to the heart. The total cholesterol level in the blood is the sum total of the Low Density Lipoprotein (LDL), Very Low Density Lipoprotein (VLDL), High Density Lipoprotein (HDL) and triglyceride levels.

LDL is the ‘bad’ cholesterol, a high level of which increases the risk for heart disease and stroke. LDL can be lowered through diet, exercise, and medication.

HDL is the ‘good’ cholesterol, a high level of which protects the heart by carrying cholesterol back to the liver to be broken down.

Triglycerides, too, increase the risk for stroke and heart disease.

<table>
<thead>
<tr>
<th>Cholesterol type</th>
<th>Goal Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cholesterol (mg/dL)</td>
<td>&lt; 200 mg/dL</td>
</tr>
<tr>
<td>LDL cholesterol (mg/dL)</td>
<td>&lt; 100 mg/dL</td>
</tr>
<tr>
<td>HDL cholesterol (mg/dL)</td>
<td>Males: &gt;50 mg/dL, Females: &gt;60 mg/dL</td>
</tr>
<tr>
<td>Triglycerides (mg/dL)</td>
<td>&lt; 150 mg/dL</td>
</tr>
</tbody>
</table>

Case study for group discussion

Jane, 69 years, is an avid cook as well as a connoisseur of good food and wine. Her cheesecakes and apple pies have been favorites at family gatherings and at the senior center, where she is a very active member. She exercises regularly and maintains a healthy weight. Recently she got her lipoprotein profile done and it gave the following results - LDL 182 mg/dl, HDL 64 mg/dl and Triglycerides 126 mg/dl.

1. Comment on Jane’s lipoprotein profile.
2. What is Jane doing right, with regard to getting LDL cholesterol under control?
3. What advice would you give Jane, regarding her cooking and diet, so that she can get her LDL cholesterol under control?
4. Does Jane need to take medication to get her LDL cholesterol under control?
Key 7 - Be physically active

Regular physical activity is very beneficial to health as we age. It improves the condition of some diseases and in some cases, can prevent them. 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

How should you plan your exercise program?

**Frequency:** Start with 1 or 2 days and increase slowly to at least 5 days/week.

**Intensity:** You should feel slightly sweaty. 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. Slowly increase to at least 20-30 minutes a day, 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.

Case study for group discussion

Although he knows the benefits of exercise, Bill has never had the time for it. He has been busy at his full time job and caring for his wife Deb who has Alzheimer’s disease. Last month, Deb was admitted to a nursing home. Bill hopes to start a regular exercise routine to improve his health. He also hopes he will feel less lonely once he is engaged in physical activity in his spare time.

1. Do you think it is too late for Bill to start a new physical activity routine? Why?
2. What benefits can Bill expect to get from regular planned physical activity?
3. What tips can you give Bill to help him get started?
4. What suggestions can you give Bill so that he can exercise safely?
Key 8 – Maintain Healthy Bones, Joints and Muscles

Osteoporosis, osteoarthritis and muscle weakness are common conditions which accompany aging. These can result in disability, pain, loss of independence, and death. Although there is no cure for these conditions, one can take steps to prevent them. Once diagnosed, there are treatments to help manage them.

Osteoporosis is a silent disease caused by the loss of minerals in bone. This results in a loss of bone strength and a high potential for fractures. Osteopenia is a milder form which precedes osteoporosis. Both Osteopenia and Osteoporosis are diagnosed using a Bone Density test. Osteoporosis can be prevented by maintaining a healthy weight, taking calcium and vitamin D supplements, and participating regularly in weight bearing, strength building and stretching activities. Early detection and treatment of these bone conditions can help manage the disease and prevent further bone loss.

Osteoarthritis is a chronic disease of the joints caused by the loss of cartilage which cushions the joint. The symptoms are pain, stiffness and loss of motion of the affected joint. It can be prevented by staying active, maintaining muscle strength, and keeping a healthy weight. These will also help you to manage the disease if you have been diagnosed with it.

Muscle weakness is caused by an age related loss of muscle strength, the reasons for which are not fully understood. Muscle weakness increases the risk of falling, injury, and frailty. Muscle strength can be regained and maintained by resistance training.

Case study for group discussion

Carole is 76, overweight and has had osteoarthritis of the knees for a long time. She has not been able to get out of her home, visit friends or exercise for a long time because of her bad knees. Last week, she stumbled and fell inside her house and bruised her knee.

1. What benefits would Carol gain by exercising?
2. What other muscle and bone problems could Carol be having?
3. How could Carol find out whether she has osteoporosis?
4. What suggestions would you give Carol so that she can start an exercise program for herself?
Key 9 – Maintain Social Contact

Staying connected with friends, family and community helps you to stay healthy, mentally and physically. It also prevents cognitive decline (memory loss).

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

Case study for group discussion

Ben is 86 and stays alone at his home. His children drop by occasionally but otherwise he does not have any visitors. He has difficulty walking and doesn’t go out much except for his trips to the grocery store. Recently, he has been having difficulty remembering names. He feels very lonely and wishes he had someone to talk to.

1. What suggestions can you give Ben to help him maintain social contact?
2. What benefits will Ben gain by maintaining social contact?
3. What cognitive disorder could Ben be having, as suggested by his memory loss?
4. How can Ben prevent further memory loss?
Key 10 – Combat depression

Clinical depression is a persistently sad mood that lasts two weeks or longer and impairs one’s ability to function in work, home or social relationships. This is distinctly different from the sadness we all experience at one time or another. There are a number of symptoms of depression and everyone will not experience the same symptoms. It is therefore important to discuss your symptoms with your doctor. Depression can be effectively treated using antidepressants and psychotherapy. Being depressed is not a normal part of life at any age. Do not stigmatize people with depressive illness.

### 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

### Case study for group discussion

Kathy is 82 and lives alone at home. Her husband died last year and since then, she has not been her usual, cheerful self. She has stopped meeting up with her friends at the senior center. She doesn’t watch Jeopardy anymore. She has difficulty sleeping at night and feels tired all the time. Her friends who visit her say that they are unable to cheer her up.

1. What do you think Kathy is suffering from?
2. As Kathy’s friend, what would you advise her to do? Why?
3. As a group, what actions could you take to help Kathy feel better, once she has started on her treatment?
Key 1
John, 72 years old, is active and energetic. Yesterday, he was dancing at a party when he fell down. He was taken to the emergency room where his blood pressure reading showed 170/110. Fortunately, he was not found to have any other illnesses. John last met with his PCP 6 months back.
◊ Why was John unaware of his high blood pressure?
   High blood pressure or hypertension usually has no symptoms and may not be identified if it is not measured.
◊ Could John have avoided what happened related to his blood pressure?
   Yes, he could have prevented this by checking his blood pressure regularly and taking treatment before it went up too high.
◊ What is a normal blood pressure?
   120/80
◊ If you were John’s friend, what suggestions would you give John which would help him get his blood pressure under control along with the medication prescribed by his doctor?
   Maintain a healthy weight, be physically active, reduce sodium in the diet, drink alcohol in moderation and follow a heart healthy eating plan.

Key 2
Betty, an RN, is 68 and has been a smoker for the past 20 years. She had felt that she needed to smoke to relieve the stress of her job. For the last 2 months she has been experiencing a persistent dry cough and a feeling of breathlessness. She suspects that she is beginning to have a touch of bronchitis. She knows that her smoking is responsible for her symptoms and wants to quit. She wonders whether she will be able to do so.
◊ Do you think Betty will be able to quit smoking?
   Yes
◊ Do you think quitting will be beneficial for her, now that she has been smoking for 20 years and has probably already developed damage to her lungs? Why or why not?
   Yes. Quitting is beneficial at any age.
◊ What other diseases do you think Mary is at risk for if she continues to smoke?
   Coronary Heart Disease, Stroke, Cancer, reduced bone density, hypertension, and throat and mouth diseases.
◊ What suggestions could you give Mary to help her quit smoking?
   Use the START program (check resource guide for more details)
   Find a quit buddy
   Smoking cessation programs
   Checking with her doctor about nicotine replacement therapy and other medications

Key 3
Mary and Bob, a married couple, are in their sixties. In the last couple of months, Mary’s sister has been diagnosed with breast cancer and Bob’s tennis partner has been diagnosed with colon cancer. Both of them have, therefore, become concerned about the possibility of cancer. Bob smokes and has been trying to quit for the past several months.
◊ Is Mary at risk for getting breast cancer? Why or why not?
   Yes, she is at risk as she is older and has a family history of breast cancer.
◊ Is Bob at risk for getting Cancer? Why or why not?
   Yes, he is at risk because he smokes and is older.
◊ What are the steps this couple can take to reduce the risk of cancer?
   Cancer screenings – the earlier cancer is found, the more likely it can be treated successfully
   Be physically active
   Increase fiber intake, reduce intake of animal fat
   Avoid tobacco products
   Use sunscreen and avoid tanning booths
   Drink less alcohol
Key 4
Jim is 85 and comes regularly to the senior center. Last year, he took the flu shot for the first time. A week following his flu shot, Jim developed fever and cough and was unwell for several days. This year, Jim has told his friends at the senior center that he has no intention to go for flu shot as he does not believe that it prevents the flu.
◊ Why did Jim get the ‘flu’ though he took the flu shot?
  Possible reasons -
  What Jim had might not have been ‘flu’.
  The flu vaccine may not prevent flu caused by all of the strains of the flu virus.
  Jim was not protected in the first week after vaccination as his body had not generated enough antibodies.
◊ Did the flu shot help him at all?
  If Jim indeed had the flu, the vaccine shot helped him to have a ‘milder case’ – it prevented hospitalization and death.
◊ Why is it important that Jim should take the flu shot every year?
  The influenza virus can mutate and change resulting in a new strain every flu season. The yearly shot provides the right antibodies for the strain causing infections that year.
◊ What makes Jim at greater risk of developing complications if he gets the flu?
  Jim is over 65 and is at a greater risk of developing complications if he gets the flu.

Key 5
Nancy, 67, is obese and does not exercise regularly. Last week, during a routine health check, she was informed that her fasting blood glucose was 112 mg/dl and was advised to exercise and lose weight. Nancy was reminded how her sister had to have her big toe amputated due to diabetes. She has decided to make concerted efforts to prevent diabetes.
◊ What condition does Nancy have, with regard to her blood glucose?
  Pre-diabetes
◊ What risk factors does Nancy have, for developing diabetes?
  Being obese, a lack of exercise, a family history of diabetes and now, pre-diabetes, are the factors which increase Nancy’s risk for diabetes.
◊ How can Nancy modify her lifestyle to prevent the onset of diabetes?
  Maintain a healthy weight
  Follow a heart healthy eating plan
  Be physically active
  Drink alcohol in moderation
  Stop smoking or using tobacco
◊ Nancy is 5 feet 4 inches tall. What is her healthy weight?
  Nancy should aim to keep her BMI less than 30. So she should maintain a weight less than 170 pounds.
  Cut back on snack foods like chips, cookies, and full fat ice cream.
◊ Does Jane need to take medication to get her LDL under control?
  If Jane has other risk factors for heart disease and her cholesterol levels are not controlled by dietary changes, she might need to talk to her doctor about cholesterol lowering medication.
Key 6
Jane, 69 years, is an avid cook as well as connoisseur of good food and wine. Her cheesecakes, carrot cakes and apple pies have been favorites at family gatherings and at the senior center, where she is a very active member. She regularly works out at the gym and maintains a healthy weight. Recently she got her lipoprotein profile done and it gave the following results - LDL 182 mg/dl, HDL 64 mg/dl and Triglycerides 126 mg/dl.

◊ Comment on Jane’s lipoprotein profile.
   Jane has a high LDL but her HDL and Triglycerides are normal.

◊ What is Jane doing right, with regard to getting LDL cholesterol under control?
   Jane maintains a healthy weight and is physically active, both of which help to reduce LDL cholesterol.

◊ What advice would you give Jane, regarding her cooking and diet, so that she can get her LDL cholesterol under control?
   - 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.

◊ Does Jane need to take medication to get her LDL under control?
   If Jane has other risk factors for heart disease and her cholesterol levels are not controlled by dietary changes, she might need to talk to her doctor about cholesterol lowering medication.
Key 7
Although he knows the benefits of exercise, Bill has never had the time for it. He has been busy at his full time job and caring for his wife Deb who has Alzheimer’s. Last month, Deb was admitted to a nursing home. Bill hopes to start a regular exercise routine to improve his health. He also hopes he will feel less lonely once he is engaged in physical activity in his spare time.

◊ Do you think it is too late for Bill to start a new physical activity routine? Why?
   No, it is not. Anyone at any age can benefit from some type of activity to improve health.

◊ What benefits can Bill expect to get from regular planned physical activity?
   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

◊ What tips can you give Bill to help him get started?
   Set a goal
   Find the time
   Turn inactive time into active time
   Find an activity buddy
   Reward yourself
   Make it fun

◊ What suggestions can you give Bill so that he can exercise safely?
   Increase activity level slowly
   Warm up before and cool down after you are physically active
   Drink plenty of fluids
   In the winter be active during the warmest part of the day and in summer, during the coolest part of the day. If the weather is bad, be active indoors
   Use hats and sunscreen
   Wear appropriate shoes
   Carry identification and a cell phone
Key 8
Carole is 74, overweight and has had osteoarthritis of the knees for a long time. She has not been able to get out of her home, visit friends or exercise for a long time because of her bad knees. Last week, she stumbled and fell inside her house and bruised her knee.

◊ Do you think Carol will benefit by exercising? Why?
   Physical activity would help reduce her weight which in turn would help reduce the stress on her knees and pain.
   Muscle strength training will improve the strength of the muscles which support the joint.

◊ What other muscle and bone problems could Carol be having?
   Muscle weakness
   Osteoporosis

◊ How could Carol find out whether she has osteoporosis?
   She should take a Bone Mineral Density Test.

◊ What suggestions would you give Carol so that she can prevent further falls?
   **Lights**: Keep hallways, stairs and rooms well lit. Put nightlights in hallways, bedrooms and bathrooms, and keep a flashlight next to your bed.
   **Stairs**: Cover stairs with a nonslip surface. Make sure that the hand rails 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 the floors, and remove electrical cords from well used areas.
Key 9

Ben is 82 and stays alone at his home. His children drop by occasionally but otherwise he does not have anyone visiting. He has difficulty walking and doesn’t go out much except for his trips to the grocery store. Recently, he has been having difficulty remembering names. He feels very lonely and wishes he had someone to talk to.

◊ What suggestions can you give Ben to help him maintain social contact?

- Greet or talk to someone each day
- Plan your day to include others
- Call a person in need each day
- Learn a new hobby
- Explore the Internet
- Write or e-mail family and friends
- Eat or cook with others
- Travel to visit family and friends
- Meet a new neighbor
- Go to a movie with a friend or two
- Start a weekly card or board game club with neighbors, family, or friends
- Join groups through senior centers, YMCAs, YWCAs, and other organizations

◊ What benefits will Ben gain by 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

◊ What cognitive disorder could Ben be having, as suggested by his memory loss?

- Mild Cognitive Impairment

◊ How can Ben prevent further memory loss?

- Maintaining social contact
- Keep the brain active – do puzzles, play bridge, join a discussion group
- Try new things – take a class, learn a new language
- Physical activity

Key 10

Kathy is 82 and lives alone at home. Her husband died last year and since then, she has not been her usual, cheerful self. She has stopped meeting up with her friends at the senior center. She doesn’t watch Jeopardy anymore. She has difficulty sleeping at night and feels tired all the time. Her friends who visit her say that they are unable to cheer her up.

◊ What do you think Kathy is suffering from?

- Kathy may be depressed.

◊ As Kathy’s friend, what would you advise her to do? Why?

- Kathy needs to meet a doctor to diagnose her depression so that she can get started with therapy and/or medication.

◊ As a group, what actions could you take to help Kathy feel better, once she has started on her treatment?

- Continue to treat her the same way as before.
- Encourage her to come and rejoin you.
- Do not stigmatize mental illness.
The foundation of the “10 Keys”™ was developed by Carol Miles, 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 Vander Bilt, MPH; Lori Kieffer; 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.”