

Brain Health As You Age: Educator Guide



Introduction to the Brain Health Educator Guide

In an effort to help you provide older adults and their caregivers with current information about brain health, we have prepared this presentation and Educator Guide.

This Educator Guide contains slides for a presentation designed to help older adults and their caregivers learn how to reduce risks that may be related to brain health. This hour-long presentation offers information at a basic level to older adults, or caregivers, or both. The slides cover:

- Aging and health
- Good health and the normal aging brain
- Threats to brain health
- Healthy aging for your body and brain

All of the information in the slides and accompanying materials has received the review of the National Institutes of Health and the Centers for Disease Control and Prevention.

If you do not have access to a projector and screen, simply use this guide to structure a conversation with your audience.

We have provided the following:

- Additional information for individual slides as needed
- A one-page brain health handout for older adults and caregivers called “Brain Health as You Age: You Can Make a Difference!”
- An optional handout, “Brain Health as You Age: Key Facts and Resources,” that includes basic information and resources for the topics covered in the presentation

This guide provides one page per slide. Please be aware that the additional information provided for about half of the slides is for your information only. You do not have to learn or recite all this information. Use the slides as your guide, along with the additional information, when needed.

Thank you for using this health education resource. We look forward to working together to keep older adults and their caregivers healthy and productive in their later years.





Slide 1: Brain Health as You Age

Brain Health As You Age: You Can Make a Difference!



A presentation by:



1



Slide 2: Aging and Health

Aging and Health

- Aging well depends on your:
 - Genes
 - Environment
 - Lifestyle

- Healthy lifestyle choices may help you maintain a healthy body and brain



2



Slide 3: Age-Related Changes in Memory and Learning

Age-Related Changes in Memory and Learning

You may find:

- Increased difficulty finding words
- More problems in multi-tasking
- Mild decreases in ability to pay attention



You can still:

- Learn new things
- Create new memories
- Improve vocabulary and language skills

3



Slide 4: Possible Risks or Threats to Brain Health

Possible Risks or Threats to Brain Health

- Some medicines, or improper use of them
- Smoking
- Excessive use of alcohol
- Heart disease, diabetes, and other health problems
- Poor diet
- Insufficient sleep
- Lack of physical activity
- Little social activity and being alone most of the time

4



Slide 5: Medicines and Brain Health

Medicines and Brain Health

Some medicines – and combinations of them – can affect your thinking and the way your brain works.



Talk with your health care provider about the drugs you take and possible side effects on memory, sleep and brain function.

5

Additional Information

Checking with your health care provider is important.

In addition, some community organizations, such as Area Agencies on Aging, hold meetings where health professionals go over peoples' medicines.



Slide 6: Smoking and Brain Health

Smoking and Brain Health

- Benefits of quitting smoking at any age:
 - Lower risk of heart attacks, stroke, and lung disease
 - Better blood circulation
 - Not exposing others to second-hand smoke

There are free resources available to help you quit smoking.



6



Slide 7: Alcohol's Effect on Brain Health

Alcohol's Effect on Brain Health

- Slow or impaired communication among brain cells, even with moderate use
- Poor driving, slurred speech, fuzzy memory, drowsiness, dizziness
- Long-term changes to balance, memory and emotions, coordination, and body temperature



Staying away from alcohol can reverse some changes.

Some medicines can be dangerous when mixed with alcohol.

7

Additional Information

Alcohol may act differently in older adults than in younger people. Some older adults can feel “high” without increasing the amount of alcohol they drink. This can make them more likely to be confused or have accidents, including falls, broken bones and fractures and car crashes, which can cause head injuries among other problems.

If people choose to drink alcohol, U.S. Dietary Guidelines for Americans say that moderate drinking is up to two drinks a day for men, and one for women.

Some people should not drink alcohol. Many older adults should be extra careful because they often take medicines that can interact with it. For example:

- Alcohol and over-the-counter cough and cold remedies together can cause drowsiness and potential accidental overdoses. Older people are at even greater risk for these side effects
- Using alcohol with common blood pressure medicines can increase risk for dizziness, drowsiness, and changes in heartbeat



Slide 8: Common Conditions that Affect Brain Health

Common Conditions that Affect Brain Health

- Heart disease, high blood pressure
- Diabetes
- Alzheimer's disease
- Stroke
- Traumatic brain injury
- Depression
- Sleep problems



8



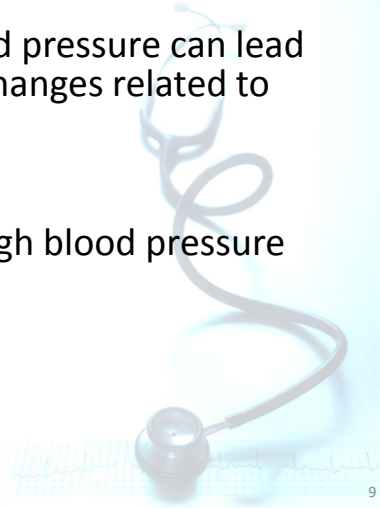
Slide 9: Heart Disease and High Blood Pressure

Heart Disease and High Blood Pressure

Heart disease and high blood pressure can lead to stroke and blood vessel changes related to dementia.

How to reduce risk:

- Control cholesterol and high blood pressure
- Exercise
- Eat healthy foods
- Quit smoking
- Limit use of alcohol



Additional Information

Many people with high blood pressure and heart disease do not know it, so it is important for you to get the recommended screenings for these health conditions.



Slide 10: Diabetes

Diabetes

- Damages blood vessels throughout your body, including your brain
- Increases risk for stroke and heart attack
- May increase risk for memory problems and Alzheimer's disease
- Maintaining a healthy weight through physical activity and healthy eating can prevent or control diabetes

Talk with your health care provider about the combination of lifestyle and medicine that works for you.

10

Additional Information

Many people with diabetes do not know that they have it. Sometimes, people with diabetes may feel unusually tired, urinate frequently, or feel very hungry or thirsty. If you have these symptoms, it is important to get screened.

Diabetes type 1 is not preventable.

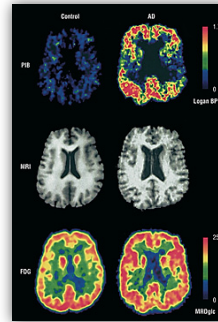


Slide 11: Alzheimer's Disease

Alzheimer's Disease

Alzheimer's is a buildup of harmful proteins in the brain, the death of brain cells, and loss of connections among them.

- Known risks:
 - Age
 - Genes, in some people
 - Head injury
- Suspected risks:
 - Heart disease
 - High blood pressure at mid-life
 - Lack of physical activity
 - Depression
 - Diabetes



11

Additional Information

People with dementia have significant problems with cognition – the ability to think, learn, and remember. Alzheimer's disease is the most common form of dementia.

You should know that some conditions can mimic dementia, like hearing loss and depression. Also, some medicines can cause confusion and memory problems. So, it is important for you to check with your health care providers to rule out these potential problems.



Slide 12: Alzheimer's Disease (continued)

Alzheimer's Disease (continued)

- Some therapies can treat Alzheimer's symptoms. They do not slow down the disease's changes in the brain.
- Some approaches show promise in reducing risk of cognitive decline or Alzheimer's, but need more testing:
 - Exercise
 - Healthy diet
 - Controlling high blood pressure, heart disease, diabetes
 - Cognitive "brain" training

12

Additional Information

Developing Alzheimer's disease has been linked to a number of risk factors, like diabetes, heart disease, high blood pressure, and lack of exercise. Researchers are studying whether specific ways of controlling these conditions or being active may reduce risk of developing the disease or prevent cognitive decline. Cognition is the ability to think, learn, and remember.

There is a lot of interest in research on "cognitive training." Researchers are investigating whether training in specific tasks will help maintain brain function. So far, studies show that some of this training can help improve skills in the training subject area. More research is being done to see how training might help people outside of the research setting.



Slide 13: Brain Injury

Brain Injury

- Older adults are at higher risk of falling and other accidents that can cause brain injury

How to reduce risk:



- Exercise to improve balance and coordination
- Take a fall prevention class
- Make your home safer
- Review medicines and vision with your health care provider
- Wear safety belts and helmets
- Get enough sleep

13



Slide 14: Depression

Depression

- Feelings of sadness or loss of interest in favored activities that last for weeks at a time
- Not a normal part of aging
- Some medicines can cause depression
- Confusion or attention problems caused by depression can sometimes look like dementia
- Treatment can involve therapy and medicine



14

Additional Information

If you or someone you care about is in crisis, please seek help immediately.

- Call 911
- Visit a nearby emergency department or your health care provider's office
- Call the toll-free, 24-hour hotline of the National Suicide Prevention Lifeline at 1-800-273-TALK (8255) or 1-800-799-4TTY (4889) to talk to a trained counselor



Slide 15: Sleep Apnea

Sleep Apnea

- Short pauses in breathing while sleeping
- Can lead to injury, high blood pressure, stroke, or memory loss, all of which can affect brain health
- Treatment begins with lifestyle changes, such as avoiding alcohol, losing weight, and quitting smoking
- Use of special devices, ordered by your doctor, may also help

15



Slide 16: So, What Can You Do to Protect Brain Health?

So, What Can You Do to Protect Brain Health?

Actions that may help:

- Take care of your health
- Eat healthy foods
- Be active
- Learn new things
- Connect with family, friends, and communities



16

Additional Information

Some of these actions can help maintain brain health. Others are still being studied to see how they might affect brain health. We do know that the actions listed in this slide are good for healthy aging.



Slide 17: Take Care of Your Health

Take Care of Your Health

- Get recommended health screenings
- Manage health problems like diabetes, high blood pressure, and high cholesterol
- Consult with your health care provider to make sure your medicines are right for you
- Reduce risk for brain injuries due to falls, and other types of accidents
- Quit smoking



17

Additional Information

Medicare beneficiaries are entitled to a free “Welcome to Medicare” visit within 12 months of joining the program as well as a free annual wellness visit.



Slide 18: Eat Healthily

Eat Healthily

- Fruits and vegetables
- Whole grains
- Lean meats, fish, poultry
- Low-fat or non-fat dairy products
- Less solid fat, sugar and salt
- Proper portion sizes
- Adequate fluids



Look into healthy meal programs, like those provided by your Area Agency on Aging.

18


Additional Information

Nutrition programs at Area Agencies on Aging provide meals and related services to older adults in a variety of places like senior centers, or in older people's homes, if they are homebound.



Slide 19: Get Moving

Get Moving

- Physical activity may:
 - Reduce risks of diabetes, heart disease, depression, and stroke
 - Prevent falls
 - Improve connections among brain cells
-  Get at least 150 minutes of exercise each week. Move about 30 minutes on most days. Walking is a good start.
- Join programs that can help you learn to move safely.
- Check with your health care provider if you haven't been active and want to start a vigorous exercise program.

19

Additional Information

Physical activity is one of the most important things an older adult can do for health. It can prevent or reduce your risk of health problems that seem to come with age, which include some of the diseases and conditions associated with brain health. It also helps you stay strong so that you can continue to do your day-to-day activities independently.

In fact, *not* doing physical activity can be bad for you, no matter your age or health condition.

If you are 65 or older and generally fit, with no limiting health conditions, you can benefit from doing aerobic and muscle-strengthening activities each week, using these guidelines:

- A combination of 2 hours and 30 minutes (150) minutes of moderate aerobic activity (such as brisk walking), with 2 or more days a week working all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms)
- A combination of 1 hour and 15 minutes (75 minutes) of vigorous-intensity aerobic activity (such as jogging or running), with 2 or more days a week working all major muscle groups
- A balanced mix of moderate- and vigorous-intensity aerobic activity, with 2 or more days a week working all major muscle groups



Slide 20: Keep Your Mind Active

Keep Your Mind Active

- Do mentally stimulating activities
- Read books and magazines
- Play games
- Learn new things
- Take or teach a class
- Be social through work or volunteering



Clinical trials have not proven that these types of activities will prevent Alzheimer's disease, but they can be fun.

20



Slide 21: Stay Connected

Stay Connected

- People who have meaningful activities, like volunteering, say they feel happier and healthier
- Social activities are linked to reduced risk for some health problems, including dementia
- Join in social and other programs through your Area Agency on Aging, Senior Center, or other community organizations

21



Slide 22: What Can You Do Today?

What Can You Do Today?

- Pick one thing you can do that may help your brain
- Think of small, first steps such as:
 - Taking a 10-minute walk a few times a week
 - Adding one serving of vegetables each day
 - Making an appointment for health screenings or a physical exam



- Write down what you will do and when
- Get support from family, friends, or community groups!

22



Slide 23: For More Information

For More Information

- Community Programs:
 - Contact a local Area Agency on Aging (AAA)
 - Contact a local Aging & Disability Resource Center (ADRC)
 - Or, go to <http://eldercare.gov/>
- National Institutes of Health: <http://nih.gov>
- National Institute on Aging at NIH: <http://nia.nih.gov>
- ClinicalTrials.gov, a service of NIH: <http://clinicaltrials.gov>
- Centers for Disease Control and Prevention:
 - <http://www.cdc.gov/aging>
 - <http://www.cdc.gov/physicalactivity>

23

Additional Information

Highlight local programs and refer to the following handouts if you have them available to distribute:

- Brain Health as You Age: You Can Make a Difference!
- Brain Health as You Age: Key Facts and Resources

In addition to health information, the NIH website has links to clinical trial opportunities for a variety of conditions and diseases related to brain health, including stroke, diabetes, Alzheimer's disease, and depression, at www.clinicaltrials.gov. An NIH-funded site www.researchmatch.org connects interested people with researchers through a free, secure website.