

## NEXT WORKSHOP:

### Physical Activity

- Start with a review of last workshop and discussion of our Brain Work.
- Learn what physical activity is and how it influences your health.
- Discuss sedentary behavior and its negative impact.
- Learn specific exercises appropriate for you.

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## WORKSHOP 1:

Overview of the 12-part Smart Aging series.

### INTRODUCTION TO

# SMART AGING WORKSHOPS



**KU** ALZHEIMER'S  
DISEASE CENTER  
The University of Kansas Medical Center

**LEAP!**  
LIFESTYLE  
ENRICHMENT  
FOR ALZHEIMER'S  
PREVENTION

# THE EFFECTS OF AGING ON BRAIN HEALTH

**As you age, your brain health depends on these factors:**



**GENES** What is your family medical history with Alzheimer's Disease? Did either of your parents experience memory issues? What about your siblings? Scientists have so far identified several risk genes implicated in Alzheimer's Disease. Risk genes increase the likelihood of developing a disease but do not guarantee that it will happen.

**LIFESTYLE** Diet, physical exercise, and socialization affect long-term health conditions, such as high blood pressure and diabetes. Retirement from work may cause a drop in cognitive stimulation.

**ABILITY TO CHANGE** You can make choices based on education, such as the Smart Aging Workshops, that become new, healthy habits.

## Changes in memory and learning related to aging

The greatest known risk factor for Alzheimer's is advancing age. For example, while one of nine people age 65 or older has Alzheimer's, nearly one of three people age 85 or older has the disease. One of the greatest mysteries of Alzheimer's Disease is why risk rises so dramatically as we grow older.

**Early signs include:**

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

**It's never too late to start to keep your brain healthy:**

Whether you are 65 or 85, research suggests you should learn new things. Create new memories. Improve vocabulary and language skills. Exercise and eat right. Improve sleep habits. Improve your mental outlook. We will cover all of these strategies throughout this workshop series.

**What are the lifestyle behaviors that threaten your brain health?**

- Smoking
- Excessive use of alcohol
- Poor diet
- Insufficient sleep
- Lack of physical activity
- Little social activity

**The good news is that these behaviors can be modified in a positive way!**

**COMMON MEDICAL RISK FACTORS:**

There may be a strong link between many medical conditions common in aging and brain health, including:

- Heart disease
- High blood pressure
- Diabetes
- Depression or anxiety
- Sleep apnea
- Some medications, or improper use of them
- Traumatic brain injury \*

### \* FALLS AND BRAIN INJURY

Research has shown a connection between moderate or severe brain injury and the risk of dementia or Alzheimer's Disease. Older adults are at higher risk of falling and other accidents that can cause brain injury.

**Here's how you can reduce your risk of falling:**

- Exercise to improve balance and coordination.
- Take a fall prevention class.
- Make your home safer.
- Ask your healthcare provider to review your medications and check your vision.
- Wear safety belts and helmets.
- Get enough sleep.



**DEMENTIA** is an “umbrella” term used to describe the symptoms of a diverse range of conditions that are defined by changes in memory, behavior, and thinking that interfere with typical, daily function.

Types of dementia include:

**PARKINSON’S DISEASE (PD)** accounts for 5% of dementia cases. PD is a degenerative disorder of the central nervous system.

**FRONTO-TEMPORAL DEMENTIA (FTD)** accounts for 5% of dementia cases. FTD is associated with rounded and tangled bundles of protein in brain nerve cells affecting social behavior and language.

**DEMENTIA WITH LEWY BODIES (DLB)** accounts for 15% of dementia cases. DLB is associated with Lewy bodies, which are abnormal microscopic findings in the brain cells affecting movement and memory.

**VASCULAR DEMENTIA (VaD)** is the second most common form of dementia, accounting for 20% of cases. VaD occurs through a reduced blood supply to the brain and is often the result of a stroke.

**ALZHEIMER’S DISEASE (AD)** is the most common form of dementia affecting memory, accounting for 50-70%. AD is a degenerative disease that attacks the brain, resulting in impaired functioning.

**Other types include:** Creutzfeldt-Jacob disease, normal pressure hydrocephalus, Huntington’s Disease, Wernicke-Korsakoff Syndrome, and mixed dementia.

## MOST COMMON TYPE OF DEMENTIA

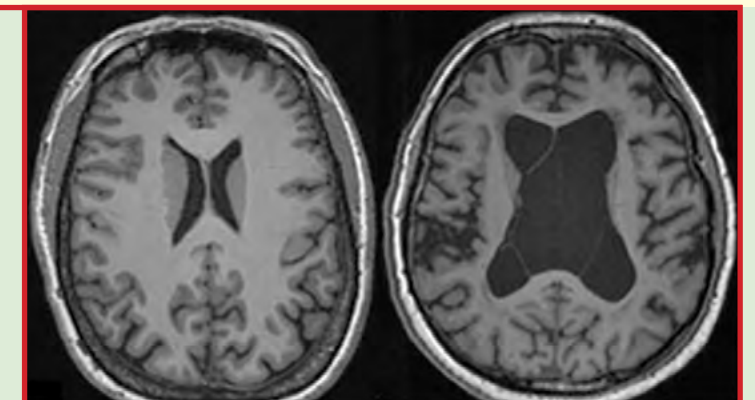
### Alzheimer’s Disease

This is by far the most common type of dementia, accounting for an estimated 60 to 80 percent of cases.

Eleven percent of adults over 65 develop the disease, with a 10 percent increase for every age group five years after. By age 85, one in three have developed the disease.

At present, 5.3 million Americans have Alzheimer’s Disease. Those most affected are women, African Americans, and Hispanics. Currently there is no cure.

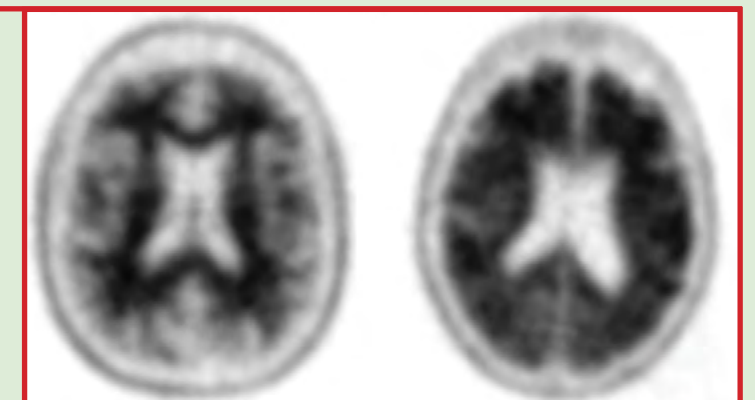
This magnetic resonance imaging (MRI) comparison of a normal brain and AD brain shows the difference in the size of the ventricles (dark areas in the middle of the brain) as well as how wide the folds on the surface of the brain are. These are indicators of structural brain loss (atrophy). People with AD have atrophy rates that can be more than twice as rapid as people without AD.



Normal

Alzheimer’s Disease

Amyloid\* accumulation in the brain shows up on this positron emission tomography (PET) scan as wide dark areas. This wide distribution of Amyloid is common in people with AD. As you can see, the dark area is more extensive in the brain affected by Alzheimer’s.



Normal

Alzheimer’s Disease

\* Brain tissue from Alzheimer’s patients shows abnormal clusters of protein fragments between nerve cells called “plaques” and strands of dead and dying nerve strands called tangles. In people who have the disease, pieces of a sticky protein found in the fatty membrane surrounding nerve cells -- called beta-amyloid -- break off and clump together to form the plaques. Some clumps may block signaling between nerve cells or activate immune system responses that further damage cells. These brain changes usually spread as the disease progresses, and plaques may form in regions of the brain involved in processes like learning, memory, thinking and planning early on in the disease.

# DRUG THERAPIES CAN TREAT ALZHEIMER'S SYMPTOMS



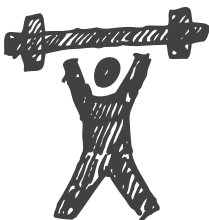
Although there is no cure, medications can temporarily slow the worsening of symptoms and improve quality of life for those with Alzheimer’s Disease. At this time, the U.S. Food and Drug Administration (FDA) has approved four medications that are used by health providers to treat the symptoms of Alzheimer’s Disease.

DRUG NAME	BRAND NAME	APPROVED FOR	FDA APPROVED
Donepezil	Aricept	All stages	1996
Galantamine	Razadyne	Mild to moderate	2001
Rivastigmine	Exelon	All stages	2000
Memantine	Namenda	Moderate to severe	2003


## WHAT'S NEW?

In 2014, results of a study published in the *Journal of the American Medical Association* showed that individuals with mild-to-moderate Alzheimer’s Disease who received high doses of Vitamin E had a 19% slower rate of functional decline than study volunteers who received a placebo. Note: Use Vitamin E to treat Alzheimer’s Disease *only* under the supervision of a physician.

# LIFESTYLE CHANGES USED TO REDUCE RISK OF ALZHEIMER'S SYMPTOMS:




**Exercise**




**Healthy diet**

**Controlling high blood pressure, heart disease, and diabetes**



**Staying mentally engaged**

**Stress management, Sleep**



Throughout this 12-part Workshop Series, your LEAP! Coach will help you incorporate these lifestyle changes into your daily life.

## DID YOU KNOW?

The KU Alzheimer’s Disease Center is part of a small network of centers to be nationally designated and funded by the National Institute on Aging and is the only center of its kind in Kansas and Kansas City. Research conducted at the center points to a healthy diet and good exercise habits as key ways to help prevent or delay the onset of Alzheimer’s. Trials at the center are ongoing to build up data to support these claims. The Smart Aging Workshop Series translates this data into everyday, practical strategies for brain health.



# HERE'S A QUICK OVERVIEW OF WHAT WE'LL BE DISCUSSING IN UPCOMING WORKSHOPS.

These topics covered by The Smart Aging Workshop Series will share how evidence-based lifestyle enrichment can help your brain health take a big LEAP! forward:

- Physical activity
- Sedentary behavior
- Healthy eating
- Stress and grief
- Social engagement
- Exercise
- Changing your behavior
- The Mediterranean Diet
- Sleep

**We'll share solid strategies.** But more importantly, we will be going into detail about specific suggestions for you to turn these strategies into everyday tasks and actions.

## DURING THIS WORKSHOP SERIES, YOU'LL LEARN TO MAKE IMPROVEMENTS IN FOUR KEY AREAS!

### ONE: GET MOVING

- Get at least 150 minutes of aerobic 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 healthcare provider if you haven't been active and want to start an exercise program.

### TWO: EAT HEALTHY

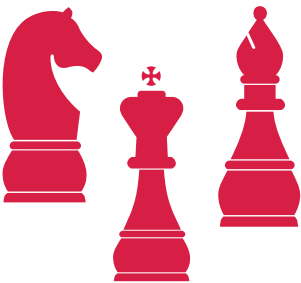
- Fruits and vegetables
- Lean meats, fish, poultry
- Proper portion sizes
- Less solid fat, sugar and salt
- Whole grains
- Low-fat or non-fat dairy products
- Adequate fluids

We will be focusing on the Mediterranean Diet which incorporates all of the factors above.



### THREE: SLEEP

- Develop a bedtime routine.
- Use room darkening shades.
- Exercise at regular times each day but not within 3 hours of your bedtime.
- Try to avoid large meals close to bedtime.
- Try to avoid napping in the late afternoon or evening.
- Stay away from caffeinated drinks late in the day.
- Alcoholic beverages make it harder to stay asleep.



### FOUR: 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.
- Play group games.
- Take or teach a class that promotes cognitive stimulation.



### DR. JAYHAWK SAYS...

According to the Alzheimer's Association, remaining socially active may support brain health and possibly delay the onset of dementia. Staying connected socially is one of the big benefits of this Smart Aging Workshop Series!

# IT’S NOT HOMEWORK...IT’S BRAIN WORK!

## Action Items before the next workshop:

ASSIGNMENT OBJECTIVE: Gain self-awareness of your current lifestyle and be ready to discuss this at the next workshop.

Make observations about yourself during your week to answer these questions at the next workshop:

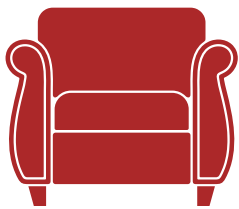
### How many hours of the day to you spend sitting?

Examples: sitting, watching TV, working on the computer, talking on the phone, etc.

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### In what ways are you active?

Examples: Walking in the store, getting up and down, walking to a meal, gardening, taking exercise classes, playing a sport, playing with the grandchildren, etc.



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### What are your eating habits?

Examples: When do you eat? What do you eat?  
What size are the portions of what you eat?

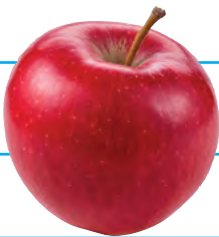
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### How well do you sleep?

How many hours do you sleep at night? If you awake during the night, how often do you do so? Do you sleep or nap during the day?



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