

Brain health and dementia: What researchers are doing

They are words nobody wants to hear: Alzheimer's disease and dementia. As the population ages, an increasing number of older adults gradually lose cherished memories and the ability to think and perform even the most basic daily functions.

More than 6.2 million people are living with Alzheimer's disease — a number expected to double by 2050 — according to the Alzheimer's Association.

The federal government spends about \$3.1 billion annually on Alzheimer's research. Another \$250 million comes from the Alzheimer's Association, and last year the American Heart Association announced a joint brain health research project with Bill Gates, as well as support for a global networking effort among research centers to accelerate early detection and treatment of Alzheimer's and related dementias.

Many drugs are being tested. Some go after what's considered one of the hallmarks of the disease — beta-amyloid protein. When this protein builds up in the brain, it clumps together to form plaques that stick in between nerve cells, interfering with the cells' ability to communicate.

What causes beta-amyloid to accumulate remains unclear. Some believe it may be an immune system response to viral infections and may be linked to the bacteria in gum disease.

A newer area of investigation focuses on drugs to stop the spread of a protein called tau, needed to stabilize the structure of nerve cells. In the brains of people with Alzheimer's disease, tau changes its structure and aggregates inside the cells, causing tangles to form. The tangles block nutrients and any communication from moving through the cells, which eventually die. That's



when symptoms appear. About 10% of dementias are vascular — linked to strokes or issues with poor blood flow to the brain. Others have mixed dementia, which can be a combination of Alzheimer's, vascular and other less common types of dementia.

Dr. Mitchell Elkind, immediate past president of the American Heart Association, says prevention has to start early.

"It's not your blood pressure in your 70s and 80s that causes dementia, but what it was in your 40s and 50s," said Elkind, a professor of neurology and epidemiology at Columbia University Irving Medical Center in New York City.

Lifestyle behaviors remain an important avenue for preventing vascular dementia. Controlling blood pressure, cholesterol and blood sugar levels and making other lifestyle changes, such as quitting smoking, exercising, eating a nutritious diet and losing weight — metrics the AHA has dubbed [Life's Simple 7](#) — help maintain good brain health as people age. ■

[Read the full story here](#)

Self-reliant businesswoman supports the science that helped save her life

Heidi Roth has always been independent and savvy.

“With no brothers or sisters, I knew growing up that I needed to take care of myself,” said Heidi, who was born in Switzerland to a Swiss father and Swiss-German mother from Wisconsin. “I’ve always been self-reliant.”



Heidi Roth
Cor Vitae Society and Paul Dudley White Legacy Society member

She attended business school and began a long career with AT&T in Wisconsin.

When she retired in 2000, her ambitious spirit inspired a second and third career. She

worked with Edward Jones for 15 years. At the same time, she completed a medical transcription program and worked at a clinic until retiring again in 2017.

Through all of Heidi’s adventures as a self-sufficient woman, she has remained frugal and smart with her investments.

“I had to think about what I’m going to do after retirement when I have the fruits of my labor,” she said. “Who am I going to give it to?”

Heidi decided to focus on a few select causes that are important to her.

“I believe in the American Heart Association because of its science and how the organization is bettering people’s lives,” she said. “With my family history of heart disease and stroke, I wanted to help find a way to cure it.”

Little did she know, Heidi would be a direct beneficiary

of research — she had a stroke in 2017. Doctors determined she had suffered an ischemic stroke, which occurs when a vessel supplying blood to the brain is obstructed.

“My life was turned upside down,” she said. “It was a terrible circumstance, and it was a lot to take in. But at the same time, I always felt there was something more I could do.”

Following months of rehab at a facility and in-home health care, her incredible recovery has been proof of the advancements in stroke care.

“It took a lot of hard work and self-determination to get my life back,” she said. “And I feel as good as I ever did right now.”

Her new lease on life has propelled her philanthropy.

“This is my legacy and I want to inspire others,” she said.

In addition to being a Paul Dudley White Legacy Society member, Heidi gives annual donations with appreciated stock.

“It is an easy process,” she said. “My father got me started with stocks, and I thought I should do something useful instead of spending it on myself. If you’re blessed with a good life, you should pass it forward.”

Making a stock gift has many benefits. The donor may receive an immediate tax deduction, may avoid capital gains tax on the securities donated and can direct their gift to a specific fund or purpose.

“What we need is people who are leaders to do the right thing and persuade others to do the right thing,” she said.

And Heidi’s advice for the rest of us?

“It’s important to live a healthy lifestyle — eat well and exercise,” she said. “When you feel good, you feel like doing positive things.” ■



To learn more about making a gift of stock, fill out our online form to instantly get your free digital information sheet on *Making Charitable Donations of Stocks & Mutual Funds*. Questions? Contact us at PlannedGiving@heart.org or 888-227-5242.



Steven and Robin Johnson, Paul Dudley White Legacy Society members

Johnson family pays it forward by paying nothing

Even before Steven Johnson fully recovered from his heart attack 17 years ago, he and wife Robin appreciated the “lifesaving work” of the American Heart Association.

“The AHA is what facilitated the science and research that helped my husband survive and recover,” Robin said. “The association also provided us with the resources needed to make positive lifestyle changes so he wouldn’t suffer another heart attack.

“Since his recovery, we celebrated the weddings of our son and daughter, welcomed our grandchild into the world and created countless cherished memories in addition to those.”

Recently, when the AHA sent the Johnsons information on [FreeWill.com/heart](https://www.freewill.com/heart), a free and easy online tool for creating and updating wills, they decided it was time to pay their blessings forward.

“We had already had several conversations about needing to update our wills with the COVID-19 pandemic,” Robin said. “When I learned about this tool, it just made sense to go ahead and create new wills.”

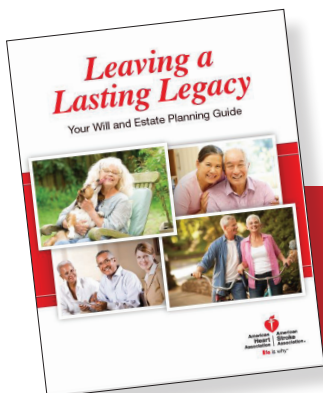
“We chose to leave a percentage of our estate to the American Heart Association. The AHA was there for us during a great time of need. We are forever thankful for the work of the association.”

The Johnsons, who have supported local hospitals, their alma maters and other meaningful causes during their 40-year marriage, included only the AHA in their estate plans because “a larger gift makes the greatest impact,” Robin said.

The Johnsons are members of the Paul Dudley White Legacy Society, which honors generous donors who include the AHA in their wills, trusts or other estate plans.

The Johnsons recommend the FreeWill service because it “provides a meaningful way to ensure end-of-life and legacy wishes” while making it easy for loved ones to execute their requests.

“We were pleasantly surprised at how comprehensive and easy FreeWill was to use,” Robin said. “We created our new wills quickly, and FreeWill addressed everything we wanted to take care of and allowed us to appropriately distribute our assets. They even sent us other helpful resources for end-of-life planning.” ■



To learn more about leaving a gift through your will or estate plan, fill out our online form to get your free brochure, *Your Will and Estate Planning Guide*. Questions? Contact us at PlannedGiving@heart.org or 888-227-5242.

Tips for a healthy holiday season

KEEP UP HEALTHY HABITS

Make a pact with yourself during the holidays. For example, decide that you'll move more and do something active every day over the next three weeks. Take it a step further, and pledge to start the day with a healthy breakfast, limit the sweets and get at least seven hours of sleep each night.

BEWARE OF SEASONAL SWEETS

The holidays often dish up extra helpings of less-than-healthy treats. Try preparing healthy snacks that are ready to eat when the urge to snack strikes. If you're hosting a holiday party, challenge yourself (and your guests, whether in person or virtual) to make delicious and healthier options using our recipes and cooking tips.

STAY ACTIVE – EVEN IN THE HUSTLE AND BUSTLE

Instead of overly criticizing yourself about missing a workout, sprinkle some healthy activities into your daily routine. For example, if the weather is cooperating and you're working from home, ride your bike around your neighborhood during a lunch break. If dinner is going to be a feast, opt for a light lunch, then take a vigorous walk.

BUT NOT TOO ACTIVE

Give yourself the gift of peace. If you need some down time to recharge, declare a me-treat and do something that relaxes you. Try yoga, meditation or spending time in nature.

MAKE A PLAN FOR THE NEW YEAR

Your poinsettia's pooped and the gifts are all gone. Now what? It's a great time to reset for the new year — but don't go dashing through your to-do list too fast or you might not stick to your plan. Lay out realistic, sustainable steps for the months ahead. For example, start a daily walking routine and sign up for a virtual Heart Walk before you set your sights on that marathon. [Visit heart.org to learn more.](https://www.heart.org)



Green Bean Casserole: A healthy take on a holiday favorite

Serves 8

Ingredients

- 1 lb frozen green beans thawed (French cut is best)
- 1 10.5-ounce can reduced-fat, low-sodium cream of mushroom soup
- ½ cup low-fat sour cream
- ½ teaspoon pepper
- 1 small onion (cut into thin strips)
- ¼ cup whole-wheat flour
- Cooking spray

Directions

1. Preheat the oven to 350°F.
2. In a 13x9x2-inch glass baking dish, stir together green beans, soup, sour cream and pepper until well blended. Bake for 20 minutes.
3. Meanwhile, spread out the onion strips on a baking sheet. Lightly spray the onion strips with cooking spray.
4. Sprinkle the flour over the onion strips, tossing to coat.
5. Lightly spray a medium-large skillet with cooking spray. Cook the onions on medium-high heat for 3 to 4 minutes, or until crispy, stirring occasionally.
6. When the casserole is done baking, remove it from the oven. Stir half of the onions into the green bean mixture.
7. Top with the remaining onions. Bake for 5 minutes, or until the onions on top are browned.

For more American Heart Association recipes, visit [recipes.heart.org](https://www.heart.org).