

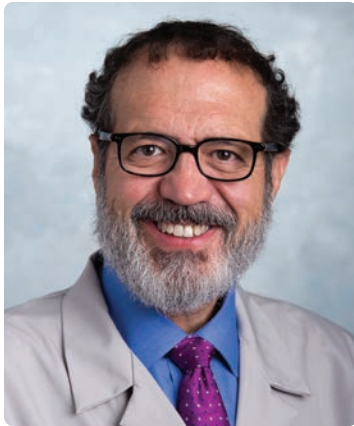
Brain News

CENTER FOR BRAIN HEALTH NEWSLETTER | AUTUMN 2017

CHAIRMAN'S WELCOME

Demetrius Maraganore, MD

Medical Director of the NorthShore Neurological Institute; Chairman of the Department of Neurology; Director of the Center for Brain Health



Many of my patients don't know this about me, but dementia runs in my family. My great-grandmother, grandmother and now my father all have developed the condition. Having been with them through the process, I'm aware that their reality could someday be mine.

But being the curious neurologist that I am, I couldn't just sit back and accept fate. I set out to learn the factors that influence a person's risk for dementia so that I could take steps in my own life to reduce that risk.

What I found shocked me: There are at least 20 modifiable risk factors for dementia — health factors and lifestyle choices that each of us has some control over. These include diet, exercise, sleep, blood pressure and cholesterol, and more. Making healthy choices means developing Alzheimer's doesn't have to be inevitable.

Upon realizing this, I asked myself: If there are so many steps I can take to lower my risk, why wouldn't I? And, as a physician, why wouldn't I do everything I could to help patients make the same changes? And, as an industry leader, why wouldn't I empower my field to change the thought paradigm around this disease? Why wait until someone has disease if we can act now to prevent it?

There are really amazing organizations out there—AARP and the Alzheimer's Association, for example—doing their best to disseminate this knowledge. We partner with them, but they can't do it alone. They can't order tests or prescribe treatments. They can't answer your specific medical questions. At the Center for Brain Health, we can.

While there's a great deal that the field of neurology doesn't yet know, you might be surprised at all that is possible—from genetic testing to preventive treatments to lifestyle interventions that can make the difference. Our brain is who we are. It's what we think, what we feel, what we perceive; and we can purposefully take care of it.

I'm excited to introduce our inaugural issue of the Center for Brain Health patient newsletter. Inside you'll find the latest Alzheimer's statistics, stories from our own patients, and more.

Brain health is my biggest passion; it's an area that's constantly changing. I wanted to create this newsletter to keep you up to date on this ever-evolving field. I'm curious what you think of the stories below. Please don't hesitate to let me know, and enjoy!

“Our brain is who we are. It's what we think, what we feel, what we perceive; and we can purposefully take care of it.”

Learn more at 847-503-4CBH or online at northshore.org/brainhealth

Testing Genetic Risk



For Chicago resident Christiane Shaughnessy, genetic testing for Alzheimer's disease never was a question. Her father was diagnosed with the disease at age 60 and passed away early last year at age 79, and her grandmother on that same side of the family also had a form of undiagnosed dementia.

Now Shaughnessy wants to know if she inherited a high risk of

Alzheimer's. She's registered to undergo a blood test at NorthShore University HealthSystem's Center for Brain Health to find out if she carries a gene variation associated with Alzheimer's—Apolipoprotein e4 or "APOE" e4. "I thought if I found out I was at high genetic risk, I would plan my life differently and go into overdrive to keep my brain healthy," says Shaughnessy.

A year ago, Shaughnessy didn't know testing for APOE existed at NorthShore. But then she attended an AARP talk featuring Demetrius Maraganore, MD, Chairman of Neurology and Director of the Center for Brain Health. There, Dr. Maraganore explained people who inherited one copy of APOE e4 are four times more likely to develop Alzheimer's disease, and people who inherited two copies are 15 times more likely to develop Alzheimer's.

"I thought if I found out I was at high genetic risk, I would plan my life differently and go into overdrive to keep my brain healthy," says Shaughnessy.

Part of Something Bigger

Shaughnessy's motivation to undergo the Alzheimer's test goes beyond herself and her family, though. As a volunteer with the Alzheimer's Association, she knows what the power of people can accomplish.

"Doing this test, and giving my blood and genes by participating in the DodoNA project—it's like I'm giving back to my dad. It's exciting to be a part of something bigger, especially if it involves prevention."

She says she initially started volunteering with the Alzheimer's Association in 2015, a year before her dad passed away. It was her way of giving when she couldn't be there for him in Germany.

Over the next two years, Shaughnessy spent roughly five hours every Tuesday in the association's downtown Chicago office. She licked envelopes, made calls to care facilities and doctors' offices, and wrote Christmas cards. The Alzheimer's test and donating her DNA to NorthShore researchers puts Shaughnessy right in the center of the cause.

Find out Christiane's test results and what's next for her in our next issue.

Kale Quinoa Tabbouleh with Lentils

Embracing a Mediterranean diet means making antioxidant-rich vegetables and inflammation-reducing, omega-3 seafood the stars of your plate. This delightful salad with brain-healthy herbs, veggies and extra virgin olive oil is a wonderful partner for grilled fish, or it can shine all on its own.

Emmaline Rasmussen, MS, RD, LDN, Clinical Research Dietitian at NorthShore, developed this lively summer salad to prove that clean eating can be delicious and satisfying, enabling your body to obtain nutrients and vitamins while your taste buds enjoy the flavors.

INGREDIENTS

- 1 ⅓ cup water
- ⅔ cup dry quinoa
- 2 large tomatoes, diced
- 1 can (about 1 ¾ cups) cooked lentils, drained and rinsed well
- 1 bunch kale, finely chopped
- 1 medium red onion, diced
- 1 medium red bell pepper, diced
- ⅔ cup parsley, finely chopped
- ½ cup mint leaves, finely chopped
- ½ cup extra virgin olive oil
- ⅓ cup fresh squeezed lemon juice
- 2 ½ tsp ground cumin
- 1 ½ tsp sea salt, plus a generous pinch
- ½ tsp black pepper

**optional: ½ cup crumbled feta*

For more delicious and brain-healthy recipes, visit northshore.org/healthy-you



We would love to hear what you think—and to see the results. Share a photo with us on Instagram or Twitter, using hashtag: #healthyfoodhealthybrain



DIRECTIONS

1. Rinse the quinoa in a fine mesh strainer (this removes some of the natural bitterness quinoa can have) and add it along with the water to a medium saucepan with a generous pinch of salt.
2. Bring to a boil, cover with a lid, reduce heat to medium low and simmer until all of the water has cooked off and the quinoa has sprouted little “tails,” about 15-20 minutes.
3. Once cooked, remove quinoa from heat and cool completely while preparing other ingredients.
4. Combine tomatoes and salt in a medium bowl, stir and set aside. This allows the tomatoes to release their natural juices, which will add flavor to the dish.
5. Whisk the olive oil, lemon juice, cumin and black pepper together in a large bowl.
6. Add the parsley, mint and kale. Toss.
7. Add lentils, onion and bell pepper.
8. Pour the tomato mixture over everything and mix well.
9. Once completely cool, add the quinoa and mix.
10. Serve topped with crumbled feta, if desired.



LIFESTYLE

Benefits of Mediterranean Diet for Brain Health — and What to do about Mercury Levels in Fish



When Dietitian Emmaline Rasmussen, MS, RD, LDN, mentions this diet to others, they may think of pastas, fresh bread and cheese. Not quite, says Rasmussen. “You want whole grains, fresh vegetables, olive oil, fish, legumes and red wine,” she says.

Anti-inflammatory properties are common in Mediterranean diet foods, and include healthy fats such as DHA and EPA, which play a role in brain growth and development. The Mediterranean diet is the first diet widely promoted for cardiovascular health that’s not low-fat.

“We’re replacing less healthful fats. When people consume fats, they’re more satiated, which can lead to reduced consumption of empty calories during the day,” Rasmussen says.

There’s another big payoff besides improved heart health: strongly adhering to a Mediterranean diet can reduce Alzheimer’s risk by at least 50 percent, according to Medical Director of the NorthShore Neurological Institute Demetrius Maraganore, MD.

Pass the Olive Oil

In a study published in 2013 of 500 adults at risk for cardiovascular disease (average age 67), researchers randomly sorted participants into two groups: One group ate a Mediterranean diet (including at least 1 liter of olive oil per week), while the other group ate a low-fat diet. On the first day, participants took memory and other cognitive tests. The groups continued to follow their specified diet for five years.

Five years later, researchers repeated the tests and found that the group eating the low-fat diet performed worse on their second round of cognitive tests, while the group eating the Mediterranean diet’s results improved. In short, this group demonstrated better cognition at age 72 than at age 67.

Mercury Worry

Despite the brain health benefits of seafood, some people worry about mercury levels in fish and consider avoiding that piece of the Mediterranean diet. People fear too much mercury could cause nervous system damage, but typically, mercury levels are low enough in humans—including humans who eat fish regularly—that it’s not a health concern.

“Anything in the sea, just eat it. Don’t worry about it,” says Dr. Maraganore.

“If you’re concerned about mercury levels in fish, are pregnant or nursing, or have a compromised immune system, there are plenty of low or trace mercury level seafood options. Wild caught Atlantic Salmon is low in mercury and is one of the richest sources of omega-3 fatty acids of all seafood options.” Other sources include walnuts and chia seeds. However, while they’re still healthy for the heart and eyes, they don’t include EPA and DHA, which means you may be missing the brain benefits.

Your best option: Whether through seafood (which is preferred) or supplements, find a way to incorporate the ocean into your diet.

It can be hard to wrap your head around numbers, especially the bigger the number.

And with Alzheimer's disease, the numbers are big.



5.5 million

estimated number of Americans living with Alzheimer's in 2017, according to the Alzheimer's Association. Let's take a closer look at exactly what that number means.

6th leading cause of death in the U.S.



1 in 3

Seniors die of Alzheimer's disease or dementia.

4 to 8

Life expectancy in years after an Alzheimer's diagnosis

2 out of 3 people with Alzheimer's are women



15%

of cases of Alzheimer's are avoidable by treating sleep problems (poor quality sleep, lack of sleep, and sleep disorders)

16.8 MILLION

Alzheimer's cases worldwide that are attributable to seven modifiable factors (diabetes, midlife hypertension, midlife obesity, physical inactivity, smoking, depression, and low educational attainment)

21%

of Alzheimer's cases in the United States are the result of sedentary lifestyles



50%

amount by which you can reduce your risk of Alzheimer's disease by following a Mediterranean diet

PHYSICIAN PROFILE

Get to know the Brains of Center for Brain Health at NorthShore



Neurologist Smita Patel, DO, empowers her patients to learn more about nutrition and integrative approaches to their health and wellness. After completing her neurology residency in 2005 at the Medical College of Wisconsin, she went on to complete fellowships in sleep medicine and integrative medicine. She's been practicing at NorthShore for more than 10 years. Here, she shares why brain health fascinates her and what she hopes for her patients.

What made you decide to go into neurology?

I had interesting cases in my neurology rotation during medical school that sparked my fascination with the brain. One of my patients had suffered a stroke, and I saw a part of the brain being destroyed by a blood clot. There was a specific loss of function coming from a specific area of the brain. Scientifically speaking, it was interesting. But it made me realize how quickly and deeply lives can be affected when something goes wrong with the brain. After further training, I learned I could help patients prevent strokes and other conditions like cognitive decline and Alzheimer's disease. For me, this work is very meaningful.

What are you doing in your own life to protect your brain health?

I try to practice what I preach: eat healthy, exercise, reduce stress. For me personally, stress reduction is something I need to work more on, so I have started a meditation practice in the evening before bedtime.

What's something you wish your patients knew about you?

I wish I was better at telling jokes because I really value a sense of humor! Laughter is medicine. We want to be enjoying life, de-stressing and socializing.

The Center for Brain Health aims to prevent Alzheimer's and related brain disorders by improving brain health. It is our mission to provide an extraordinary neurological healthcare experience to every patient—delivered by one of the highest ranked physician teams in the nation. We are internationally recognized for our innovative use of technology, and for our leadership in quality improvement and practice based research.



To opt out of future mailings of BrainNews please email BrainHealth@northshore.org.

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