

BUZZ, BODY & BITES

A newsletter for actively aging adults
Virginia Cooperative Extension
Family & Consumer Sciences
June, 2021 Newsletter

Buzz

COGNITIVE RESERVE AND BRAIN RESERVE

What are they?

Cognitive Reserve:

Cognitive reserve is the extent to which the brain can use existing brain networks to compensate for damage, like that caused by Alzheimer's disease or a stroke, without affecting the person's ability to think and reason.

Brain Reserve:

Brain reserve relates to the structural characteristics of the brain - size, number of neurons, etc. - that help a person tolerate brain damage without affecting their ability to think and reason.

Leisure activities to increase cognitive reserves:

- Reading newspapers or books
- Playing a musical instrument
- Attending museums
- Traveling
- Volunteering
- Participating in sports
- Dancing

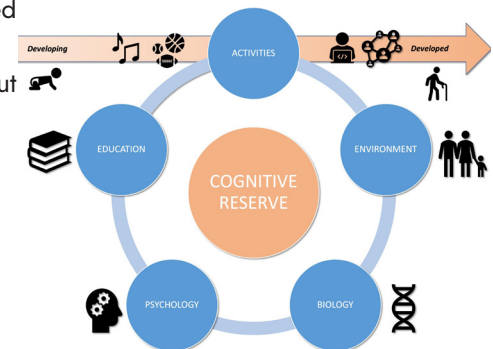


How is your cognitive reserve?

You've probably heard that exercising regularly and eating a healthy diet can help you keep your mind sharp later in life. But what you might not know is that there are many other activities – everything from dancing to playing cards with friends – that contribute to better mind and nervous system health during aging. The concept of **cognitive reserve**, developed by Columbia University Neuropsychologist Yaakov Stern, suggests that a wide variety of activities considered part of a cognitively engaged and brain healthy lifestyle may contribute to cognitive resilience later in life. We know that formal and informal education experiences and work contribute to cognitive reserve. There is increasing evidence that leisure time activities also increase cognitive reserve.

These same types of activities may also contribute to **brain reserve**, the structural or functional differences in the brain that may protect against decline later in life. In one study of people with Alzheimer's disease (AD), individuals with the same level of decline in their mental function had very different amounts of actual brain damage. Those individuals with more education during their lives had less decline in mental function as the disease progressed. This suggests that differences in cognitive reserve offered a protective effect for those with more education. Although they still eventually experienced the cognitive impairments associated with AD, impairments occurred later in life.

Staying mentally and physically active throughout life may increase a person's cognitive reserve that acts as a defense against declines in the brain. Life experiences throughout midlife and the beginning of old age, like employment, lifelong education, and social activities play a key role in the direction of brain and cognitive development during aging. By staying mentally and physically active and engaged throughout life, people increase their chances of a longer period of better mental health during late aging.



From: Schoentgen, 2020 Front. Psychol., 21 July 2020

Contributed by: Benjamin Katz, PhD
Human Development & Family Science, Virginia Tech

Bites

Oven-Fried Fish



Fish is an excellent source of protein, is low in saturated fat, and can be high in omega-3 fatty acids. A healthy eating pattern includes fish, legumes, and nuts often. This recipe is quick and easy, and you can use any type of white fish, so choose your favorite! (Recipe from: Heart Healthy Cooking African American Style, NHLBI)

Ingredients:

- 1 ½ pounds fish fillet (any white fish)
- 1 tablespoon lemon juice
- ¼ cup low-fat milk or buttermilk
- 2 drops hot sauce (optional)
- 1 teaspoon fresh garlic minced or ¼ teaspoon garlic powder
- ¼ teaspoon each of black pepper, onion powder, and salt
- ½ cup fine corn flake crumbs or regular bread crumbs
- nonstick cooking spray
- 1 fresh lemon cut into wedges for serving

Instructions:

Brush fish with lemon juice. Combine milk, hot sauce, and garlic in a shallow dish. Combine the bread crumbs, pepper, salt and onion on a plate. Dip fish on both sides in the milk, and then coat on both sides with the bread crumbs. Arrange breaded fish on a lightly oiled shallow baking dish. Spray the fish with the cooking spray to moisten the crumbs.

Bake 20 minutes on middle rack at 475 degrees F. Do not turn the fish. Cook until tender (internal temperature of 145 degrees F). Serve with fresh lemon.

Mind Games

Solve these brain teasers:

1. What can you put between 7 and 8, to make the result greater than 7, but less than 8?
2. What word in the English language does the following: the first two letters signify a male, the first three letters signify a female, the first four letters signify a great man, while the entire word signifies a great woman. What is the word?
3. What are the next three letters in this combination? OTTFSS
4. What speaks without a mouth, hears without ears, has no body, but comes alive with wind?
5. How is seven different from the rest of the numbers between one and ten?
6. I go all around the world, but never leave the corner. What am I?
7. Where would you take a sick boat?

- Answers:
 1. A decimal point. Your result would be 7.8, which is between 7 and 8.
 2. Heroine
 3. E N T (Each letter represents the first letter in the written numbers: One, Two, Three, Four, Five, etc.).
 4. An echo
 5. Seven has two syllables and the other numbers only have one syllable.
 6. A stamp
 7. To the dock

Body

Wheelchair or Chair Exercises

The next several issues will include an exercise that helps keep core muscles strong, specifically for wheelchair users or those who enjoy doing chair exercises.



Seated Side Stretch

- Sit straight in your wheelchair or chair.
- Inhale and reach your right arm straight overhead with the palm facing in.
- Slowly lean the arm and torso as far as is comfortable to the left.
- Hold it for one to two seconds.
- Exhale, and return to center and lower the arm.
- Do five to ten repetitions on each side.

RESOURCES

Seniors Mobility

seniorsmobility.org

SilverSneakers

tools.silversneakers.com

Virginia's Community Colleges

Consider taking an enrichment course at your local community college. Search for one at www.vccs.edu.

Yelp

Search for local dancing lessons by searching for "dance lessons" and your zip code on www.yelp.com.

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