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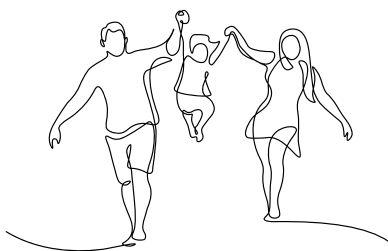
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## Stress and Your Brain

Stress happens every day and can appear in a variety of ways. You may feel stress from trying to juggle family, work, school, and caregiving. It can involve issues like money, health, and relationships.

Stress can lead to physical symptoms, such as headache and chest pain. It can cause you to feel anxiety or sadness, and stress could lead to outburst behaviors or changes in eating patterns.

While you may know that stress can harm your mind and body, you might not know how it affects your brain. When you face stress, your brain goes through a series of reactions. Some of these are good and some are not. Sometimes stress can help sharpen your mind and help you function at a higher level. Other times, stress can have negative effects on the brain and can lead to mental illness and even shrinking the volume of the brain. Stress can also hurt your memory. If you have been through a very stressful event, details may be hard to remember. And, we can all relate to this – minor stress can impact your memory immediately, as you struggle to remember where you left your car keys or briefcase when you are late for work.

Since we know that stress cannot be avoided, it is best to prepare yourself with a toolbox of ways to deal with stress. Here are some suggestions.

**Focus on what you can control in your situation.** Stick to a routine as much as possible, even though stress can be unpredictable.

**Take care of yourself.** Eat healthfully, get regular exercise, get good sleep (lack of sleep can make things even worse), limit alcohol to one 5-ounce drink/day (women) or two for men, avoid smoking, and engage in deep breathing exercises, stretching, and/or meditation.

**Exercise for stress-busting benefits.** Exercise can help alter your mood as it bumps up production of endorphins, your brain's feel-good neurotransmitters. It also provides stress relief for your body by improving your cardiovascular, digestive, and immune

systems. Exercise can improve your mood, help relieve tension and anxiety, improve sleep, increase self-confidence, and give you a sense of command over your body and life.

**Connect with others and avoid isolation.** Confide in people you trust about your situation and how you are feeling. Also, connect with your community and/or faith-based organizations.

**Get organized to better manage your situation.** If you are feeling stressed by a large task, divide into small groups of tasks or layers. This can help you feel less overwhelmed.

**Get help if you need it.** By reaching out for help, you can become more resilient and better able to manage stress. This, ultimately, can protect your brain health.

**Reframe your stress.** It is impossible to live a life without stress and doing so would likely be uninteresting. Think about a negative situation that is stressful for you right now. Can you change your self-talk to be less negative? Can you view a potentially negative situation as a challenge rather than a threat? Try to look for a “gift” in each stressful experience. Reframing can have a big impact on the way you view stress, which ultimately benefits body and brain health.



## Walk Kansas 5K for the Fight!

Join us on Saturday, May 7, where there is fun for the entire family. The 5K is a timed event and the 1.5-mile fun walk is, well, just for fun! There is also a 50-yard fun run for kids and the local Masons will offer cancer screening throughout the morning for anyone.

Register by April 24 to guarantee a race T-shirt on the day of the event. All proceeds of this event will benefit cancer research at K-State through the Johnson Center for Cancer Research. We hope you can join us for a fun-filled morning! Visit our event page, [ksre-learn.com/WalkKansas5k](https://ksre-learn.com/WalkKansas5k), for more details and to register.

## Benefits of Strength Training

Strength training is included in the Physical Activity Guidelines for Americans for a good reason. You start losing muscle around age 30, and the rate of muscle loss accelerates when you reach your 50s. Some muscle loss is part of the aging process, but inactivity accounts for the rest. Progressive strength training can prevent muscle loss and increase strength and bone density in adults and older adults.

Walking and other types of aerobic activity provide many health benefits, but they don't make your muscles strong. Strength training does. You can feel a difference when your body is stronger. Strengthening exercises also improve your balance, coordination, and agility, allowing you to perform everyday movements much easier.

Do muscle-strengthening activities two to three days a week, with a “rest” day between. Work all major muscle groups including the legs, hips, back, stomach, chest, shoulders, and arms. Following are strengthening exercises you can do at home or in a gym:

**Free weights or dumbbells.** These are classic tools used to strengthen your upper body. They are inexpensive and available in many sizes. Start with 2-, 3-, or 5-pound weights and gradually increase the number of repetitions and weight as your muscles get stronger.

**Body weight exercises.** These require no equipment since they use your body weight for resistance. Try push-ups, pull-ups, abdominal crunches, and leg squats.

**Resistance tubing or bands.** These offer weight-like resistance when you pull on them. They are inexpensive and good for building strength in arms and other muscles and are available in varying degrees of resistance.

If you are new to strength training, start slowly. Make sure you warm up with 5 to 10 minutes of stretching or walking. Choose an appropriate weight or resistance level that will challenge you.

Each exercise set should include 12 repetitions, meaning you will lift the weight the same way 12 times in a row, then rest. Aim to perform 2 to 4 sets of 12 repetitions with each exercise.

Work opposing muscle groups with each set. For example, if you start with a set of exercises using your right arm, switch to the left and perform the same set. Then repeat with your right arm, and then switch back to the left again.

Videos that demonstrate strengthening exercises can be found on the Walk Kansas website ([walkkansas.org/activity/strength.html](https://walkkansas.org/activity/strength.html)) and a variety of other sources.

## Berries: A Nutritional Powerhouse

One of the most potent weapons against dementia and Alzheimer's disease appears to be berry fruits. MIND diet guidelines recommend a minimum of two ½-cup servings of berries each week and more is even better.

So, what is it about the humble berry that is so beneficial? Fruits and vegetables, in general seem to protect the brain. Berries, specifically those that are blue, black, purple, and red, aid in slowing the progressive loss of structure or function of neurons, a process known as neurodegeneration.

Neurons are the building blocks of the nervous system. They normally don't reproduce or replace themselves, so when they are damaged or die, they cannot be replaced by the body. Alzheimer's is a neurodegenerative disease, and so is Parkinson's and Huntington's disease.

Berry fruits can help your brain stay healthy in several ways. They contain high levels of antioxidants, which protect cells from damage by harmful free radicals. Berry fruits also appear to change the way neurons in the brain communicate. These changes in signaling help prevent inflammation in the brain that contributes to neuronal damage.

Studies also show that berries can improve memory and attention to required tasks by increasing blood flow to key areas of the brain. These improvements in brain function may also help slow the aging process.

Eating berries regularly, along with other fruits and vegetables, will ensure that these unique protective compounds are in your blood stream helping to improve your brain function throughout life. Enjoy blueberries, strawberries, blackberries, cherries, raspberries, and more in different ways. Add them to your cereal at breakfast, include them in a smoothie, add berries to a salad, main dish, or dessert. Or, just enjoy a handful of berries as a snack.



## Blueberry Muffin Smoothie

Makes 2 Servings

### Ingredients:

- 1½ cups low-fat milk
- 2 cups frozen blueberries
- 1 large frozen banana, sliced
- ½ cup old-fashioned rolled oats
- 2 teaspoons vanilla extract
- Dash cinnamon

### Directions:

1. Wash hands with soap and water.
2. Place all ingredients in a blender. Blend on high until smooth and creamy.
3. Pour into 2 glasses. If desired, top each smoothie with another dash of cinnamon.

**Nutrition Information per serving:** 347 calories; 1 g fat; 70 g carbohydrates; 11 g protein, 11 g fiber; 81 mg sodium; 38 g sugar.



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