By Mark Underwood

Neuroscience Researcher

Can the foods you eat affect your mind and memory? Absolutely. Certain foods can have a significant impact on health and behavior and affect your mood and concentration skills. Junk food, for example, including fatty, sugary snacks, triggers pleasure centers in the brain. That's why when bowls of candy or chips are in front of you, it can be hard to stay away.

Think of your brain this way—it only weighs about three pounds—that's a small portion of an adult's body weight, but it consumes about 20 percent of your daily calories. That's a good motivator for having a brain-healthy diet.

Stay on course and boost brain fitness with these tips:

Memory boosting food

In order to memorize and retain new information brain cells have to make new connections.

One way is when we get excited about something or have deep feelings and emotions.

Acetylcholine is the "messenger" that keeps brain cells on high alert for new information.

Acetylcholine is in eggs, liver and soybeans, cabbage, broccoli and cauliflower.

Foods to Concentrate on Good concentration skills depend on a steady flow of messages between brain cells. The first step in improving concentration and focus is by eating healthy food at regular intervals.

The brain also needs myelin, a fatty substance that insulates the nerve fibers so signals can be more easily sent from one brain cell to another. Eat healthier and keep the "machinery" of your brain in top shape.

A diet that includes myelin includes oily fish, walnuts, pumpkin and flax seeds.

Lift Your Spirits

Our moods, good, bad and everything in between, involve an exchange of electrical "messages" carried by neurotransmitters between the brain cells. One of those transmitters carrying messages to the brain is dopamine. Foods that are sugary and fatty have dopamine which is why we may feel good when we eat these foods. But soon, there is a sharp drop off feeling good.

A healthier way to feed your brain is with precursor, the molecules that form dopamine. One of those precursors, called phenylalanine, can be found in food like soybeans, edamame, beets, almonds, eggs, meat and grains.

Chocolate can help boost spirits because it drives up dopamine, but use it only as a pleasurable snack.

More Healthy Eating Tips

Keep an eye on your blood pressure. Even in healthy older adults, high blood pressure can damage blood vessels in the brain and reduce the brain's oxygen supply. This can result in nerve cells that are damaged, a factor that can impact decision-making and memory. Instead of eating salty foods, cut back on sodium and eat plenty of fresh fruits, veggies and whole grains.

A healthy diet will help you maintain a healthy weight. Excess weight can have a negative impact on your brain's health regardless of whether you have diabetes or high blood pressure. Lower your intake of sugars and white flour and eat plenty of fiber-rich foods, and use olive and canola oils.

For years we've been told that veggies are good for our health, but some research now

suggests that green leafy vegetables in particular, may help slow mental decline. So don't forget to stock up on leafy greens like kale, and lettuces like romaine and spinach.