

How Memory Works

Your mind works a lot like a computer. Your brain puts information it judges to be important into "files", and this information is stored in different parts of your memory. For example, information stored in short-term memory may include the name of a person you met only moments before. Information stored in recent memory may include what you ate for breakfast. And, information stored in remote memory can include things from years ago, such as memories of childhood. When you remember something, you pull up a file. However, memory doesn't always work perfectly. As people grow older, it may take longer to retrieve those files. Some adults joke about having a "senior moment." It's normal to forget things once in awhile. We've all forgotten a name, where we put our

keys, or if we locked the front door. But forgetting how to use the telephone, or find your way home, may be signs of a more serious problem. If you're worried about your forgetfulness, see your doctor. When you're in your 20s, you begin to lose brain cells a few at a time. Your body also starts to make less of the chemicals your brain cells need to work. The older you are, the more these changes can affect your memory. Aging may affect memory by changing the way the brain stores information, and by making it harder to recall stored information. Your short-term and remote memories aren't usually affected by aging, but your recent memory may be affected. For example, you may forget names of people you've met recently, but these

may be normal changes. What about when you know a word, but can't recall it? This is usually just a glitch in your memory. You'll almost always remember the word with time. This may become more common as you age. It can be very frustrating, but it's not usually serious. Many things other than aging can cause memory problems. These include depression, side effects of drugs, strokes, head injury, thyroid problem, and dementia. Dementia is a severe problem with memory and thinking, such as Alzheimer's disease.

"We do not know the true value of our moments until they have undergone the test of memory."
- Georges Duhamel
(1884—1966)

Inside this issue:

Bad Predictions	2
Totally Useless Trivia	2
Exercise, The fountain..	2-3
Do I Need to Change ...	3
Folic Acid	4
The Name's Familiar	4
Advice For Today	5



Quotes to remember

"Memory moderates prosperity, decreases adversity, controls youth, and delights old age.

Lactantius Firmianus, A Christian apologist of the fourth century.



Why are stoplights Red, Yellow, and Green?

Stoplights are red, yellow, and green because traffic officials, early on, copied the code system that railroad engineers devised for track systems to control trains. The goal of the railroad engineers in crafting this code was to prevent often fatal train collisions, by giving the trains advance

warning. Therefore they did not take their task lightly in selecting the symbolic colors for the signals. Red, the color of blood, proved a logical choice for the "stop" signal, as for thousands of years, this color foretold danger. The color alone, railroad engineers reasoned, should give people cause to

pause, to abide by the signal, and to stop or suffer the consequences of death and destruction. Engineers used the trial and error method in selecting the other colors. The first trial in the 1830s, that of choosing green for the "caution" signal, and clear for the "go" signal, failed miserably.

"If one tells the truth, one is sure, sooner or later, to be found out."

- Oscar Wilde (1854—1900)

Bad Predictions



"I find it difficult to believe that the seat belt can afford the driver any great amount of protection over and above that which is available to him through the medium of the safety-type steering wheel, if he has his hands on the wheel and grips the rim sufficiently tight to take advantage of its energy absorption properties. And, if he also takes advantage of the shock-absorbing action which can be achieved by correct positioning of the feet and legs."

- General Motors vehicle safety engineer Howard Gandelot, 1954.

From the book **Bad Predictions** by Laura Lee



"The mind is its own place, and in itself can make a heaven of Hell, a hell of Heaven."

- John Milton (1608—1674)

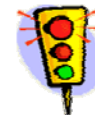


Why are stoplights Red, Yellow, and Green? (cont.)

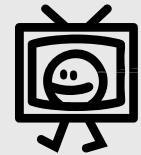
Clear as a choice for the "go" signal, could be affected by the light cast from typical street lamps, or from the glare of the sunlight, and, thus, could quite easily be mistaken as still "ON"...after the light had actually changed.

This failure prompted the railroad engineers to alter their color selections to red for "stop", green for "go", and yellow for "caution". Traffic engineers, taking the easy route, scurried off with this system of color

coding, and instituted the very first electric street stoplight in Cleveland, Ohio in 1914. The first signal did not include the color yellow for "caution", but yellow was incorporated within a few years. Hence, railroad engineers, not traffic engineers, should be credited for the lives saved by their system of coding warning signals red, yellow, and green. ■



Milton Berle's comedic genius changed the course of early television with his variety-comedy show, "Texaco Star Theater," that launched in the fall of 1948. His first show's guests were Pearl Bailey, Bill "Bojangles" Robinson, Smith and Dale, and Señor Wences.



Totally Useless Trivia

Since Neptune's discovery in 1846, it has made only about three-quarters of one revolution of the sun.

A car's instrument panel is called a dashboard. The term dates back to horse and buggy days when dashing horses kicked up mud, splashing the passengers riding behind them. The

dashboard was devised to protect them.

Kielbasa, a smoked sausage of coarsely chopped beef and pork, and flavored with garlic and spices, is from the Polish word *Kielbasa*, the word for sausage – kielbasa sausage literally means "sausage sausage."

The duffel bag got its name from the Belgian town of Duffel, where the coarse, thick napped, woolen fabric used for the bags was manufactured.



Exercise, The Fountain of Youth?

There is a fountain of youth. Millions have discovered it - the secret to feeling better and living longer. It's called staying active. Finding a program that works for you and sticking with it can pay big dividends. Regular exercise can prevent or delay diabetes and heart trouble. It can also reduce arthritis pain, anxiety, and depression. It can

help older people stay independent. There are four main types of exercise, and seniors need some of each:

- Endurance activities - like walking, swimming, or riding a bike - which build "staying power" and improve the health of the heart and circulatory system
- Strengthening exercises which build muscle tissue and re-

duce age-related muscle loss

- Stretching exercises to keep the body limber and flexible
- Balance exercises to reduce the chances of a fall.

Is it safe for me to exercise? It is safe for most older adults to exercise. Even patients with chronic illnesses such as

continued next page...

Exercise, The Fountain of Youth? - continued

heart disease, high blood pressure, diabetes, and arthritis, can exercise safely. Many of these conditions are improved with exercise. If you are not sure if exercise is safe for you, or if you are currently inactive, ask your doctor. It is important to wear loose, comfortable clothing and well-fitting, sturdy shoes. Your shoes should have a good arch support and an elevated and cushioned heel to absorb shock. If you are

not already active, you should begin slowly. Start with exercises that you are already comfortable doing. Starting slowly makes it less likely that you will injure yourself. Starting slowly also helps prevent soreness from overdoing it. The saying "no pain, no gain" is not necessarily true for older adults. You do not have to exercise at a high intensity to get health benefits. Walking, for example, is an excellent activity to start with. As you be-

come used to exercising, or if you are already active, you can slowly increase the intensity of your exercise program. Exercise is only good for you if you are feeling well. Wait until you feel better to exercise if you have a cold, flu, or other illness. If you miss exercise for more than two weeks, be sure to start again slowly . ■

"Nobody ever went broke saving money."
- Mark Twain (1835 - 1910)

Do I need to change what I eat?

If you answer "yes" to any of the following questions, you may need to talk with your doctor about nutrition:

- Has your doctor ever talked with you about a medical problem, or a risk factor, such as high blood pressure or high cholesterol?
- Did your doctor tell you that this condition could be improved by better nutrition?
- Do diabetes, cancer, heart disease, or osteoporosis run in your family?
- Are you overweight, or have you gained weight over the years?
- Do you have questions about what kinds of foods you should eat, or whether you

should take vitamins?

- Do you think that you would benefit from seeing a nutritionist? (A nutritionist is a registered dietitian who specializes in nutrition counseling).

"Won't it be hard to change my eating habits?" Probably, but even very small changes can improve your health considerably. The key is to keep trying to eat the right foods, and stay in touch with your doctor and nutritionist to let them know how you're doing. Here are a few suggestions to help you improve your eating habits: Find the strong points and weak points in your current diet. Do you eat 5 to 7 servings of fruits and vegetables every day? Do you get enough

calcium? Do you eat whole-grain, high-fiber foods regularly? If so, good! You're on the right track. Keep it up. If not, you can learn to make the changes you need to make. Make small, slow changes, instead of trying to change everything all at once. Small changes will be easier to make and stick with. Keep track of your food intake by writing down what you eat and drink every day. Use this record to help you see if you need to eat more from certain food groups, such as fruits, vegetables or dairy products. Think about asking for help from a nutritionist if you haven't already done so -- especially if you have a medical problem that requires you to follow a special diet. ■

Interesting Fact

Why are most Glow-in-the-Dark items green or red, and why do they glow?

A phenomenon called **phosphorescence** is responsible for the light most Glow-in-the-Dark items emit. Phosphorescence occurs when light absorbed by an object is slowly released after the light source is removed. In its natural state, the light the object emits is dim, and is always pale blue in color. Chemists had a bright idea to spark interest in this phenomenon, and to make it visually stimulating. They discovered that when they mixed fluorescent dye with the phosphorescent material, the object emitted a brighter glowing, green, or sometimes, red light. The reason for this increase in brightness is that fluorescent compounds absorb light and rapidly emit it, giving the compounds a glowing appearance. This phenomenon, however, occurs only in the constant presence of the original light source. The phosphorescent material absorbs the light, and slowly emits a pale blue light, that in turn is absorbed by fluorescent dye. The light now emitted is green or red light, depending on the type of dye used. Paired together, the phosphorescent material and the fluorescent material, produce a ghostly, glowing green or red light, providing hours of enjoyment for young and for old alike.




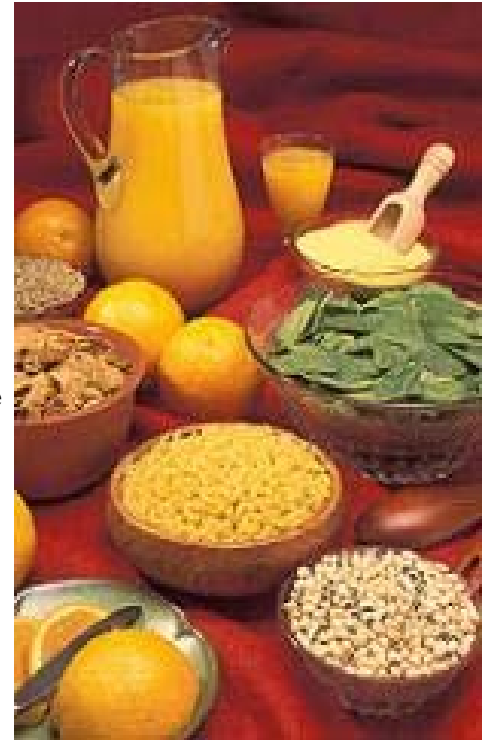
"Dad, could you read me another story? I read that one on the internet today."

Folic Acid

Also called: Folacin, Folate, Pteroylglutamic acid, or Vitamin B9. Folic acid is a B vitamin. It helps the body make healthy new cells. Everyone needs folic acid. For women who may become pregnant, it is really important. When a woman has enough folic acid in her body before and during pregnancy, this can help prevent major birth defects of her baby's brain or spine. Folate and folic acid derive their names from the Latin word *folium* (leaf).

A key observation by researchers in 1931 led to the identification of Folate as the nutrient needed to prevent anemia during pregnancy. This demonstrated that anemia could be reversed with brewer's yeast. Folate was identified as the corrective substance in brewer's yeast in the late 1930s, and was first isolated in spinach leaves in 1941. Researchers isolated the pure crystalline form in 1943, and were able to determine its chemical structure at the Lederle Laboratories of the American Cyanamid Company. This led to the subsequent synthesis of folic acid in 1945. So, if you don't get enough folic acid from the foods you eat, you can also take it as a dietary supplement.

Foods with folic acid include leafy green vegetables, fruits, dried beans, peas and nuts. Enriched breads, cereals, and other grain products also contain folic acid.



What two words have the most letters?

Answer, bottom of page 2



"You may not want to hear this. It's you I'm complaining about."



The Name Sounds Familiar

Shojiro Ishibashi was born in 1885 in Japan. When he came of age, Ishibashi entered the family business, making tabi, the traditional Japanese footwear. In 1923, he patented a rubber soled tabi, which increased his fortunes. He quickly looked to other rubber products to sell, and in 1928 began producing tires. He was the first Japanese manufacturer to do so. Ishibashi's goal was to sell his products overseas to British and American consumers, and felt he would need an English name for his company. Ishibashi means "stone bridge" in English." As a tip of the hat to fellow rubber manufacturer, Harvey Firestone, Ishibashi reversed the words and

came up with the Bridgestone Tire Company.

In 1988, Bridgestone bought Firestone. The companies were consolidated in 1990 under a unified organization called Bridgestone/Firestone, Inc.



From the book **The Name's Familiar** by Laura Lee

"If it weren't for electricity, we'd all be watching television by candlelight."
- George Gobel (1919—1991)

"There are two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle."
- Albert Einstein (1879—1955)



"All these years I've been barking at you and I've really never gotten to know the real you."



Advice for Today

Sleep apnea

Introduction

Have you been told that you snore loudly? Do you wake up feeling tired after a full night's sleep? Are you sleepy during the day? If so, you may have sleep apnea. In this potentially serious sleep disorder, breathing repeatedly stops and starts during sleep. "Apnea" is Greek for "without breath."

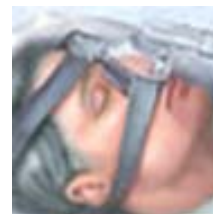
Sleep apnea occurs in two main types: **obstructive sleep apnea**, the more common form that occurs when throat muscles relax, and **central sleep apnea**, which occurs when your brain doesn't send proper signals to the muscles that control breathing. Additionally, some people have **complex sleep apnea**, which is a combination of both obstructive and central sleep apneas.

Obstructive sleep apnea occurs two to three times more often in older adults, and is twice as common in men as in women. Treatments for sleep apnea may involve using a device to keep your airway open, or undergoing a procedure to remove tissue from your nose, mouth, or throat.

Signs and symptoms

The signs and symptoms of obstructive and central sleep apneas overlap, sometimes making the type of sleep apnea more difficult to determine. The most common signs and symptoms of obstructive and central sleep apneas include:

- Excessive daytime sleepiness (hypersomnia)
- Loud snoring
- Observed episodes of breathing cessation during sleep
- Abrupt awakenings accompanied by shortness of breath
- Awakening with a dry mouth or sore throat
- Morning headache
- Difficulty staying asleep (insomnia)



Continuous positive airway pressure (CPAP)

Disruptive snoring may be a more prominent characteristic of obstructive sleep apnea, while awakening with shortness of breath may be more common with central sleep apnea.

Causes

Obstructive sleep apnea occurs when the muscles in the back of your throat relax. These muscles support the soft palate, the triangular piece of tissue hanging from the soft palate, called the uvula, the tonsils, and tongue. When the muscles relax, your airway narrows or closes as you breathe in, and breathing momentarily cuts off. This can lower the level of oxygen in your blood. Your brain senses this inability to breathe and briefly rouses you from sleep so that you can reopen your airway. This awakening is usually so brief that you don't remember it. You can awaken with a transient shortness of breath that corrects itself quickly, within one or two deep breaths, although this is rare. You may make a snorting, choking, or gasping sound. This pattern can repeat itself 20 to 30 times, or more, each hour, all night long. These disruptions impair your ability to reach those desired deep, restful, phases of sleep, and you'll probably feel sleepy during your waking hours.

People with obstructive sleep apnea may not be aware that their sleep was interrupted. In fact, many people with this type of sleep apnea think they sleep well all night.

Central sleep apnea, which is far less common, occurs when your brain fails to transmit signals to your breathing muscles. You may awaken with shortness of breath, or headaches. The most common cause of central sleep apnea is heart disease. People with central sleep apnea may be more likely to remember awakening than people with obstructive sleep apnea. Sleep apnea may occur if you are young or old, male or female. Even children can have sleep apnea.

Treatment

For milder cases of sleep apnea, your doctor may recommend lifestyle changes such as losing weight, or quitting smoking. If these measures don't improve your signs and symptoms, or if your apnea is moderate to severe, a number of other treatments are available. Certain devices can help open up a blocked airway. In other cases, surgery may be necessary. If you have moderate to severe sleep apnea, you may benefit from a CPAP (SEE-pap) machine that delivers air pressure through a mask placed over your nose while you sleep. With CPAP, the air pressure is somewhat greater than that of the surrounding air, and is just enough to keep your upper airway passages open, preventing apnea and snoring.

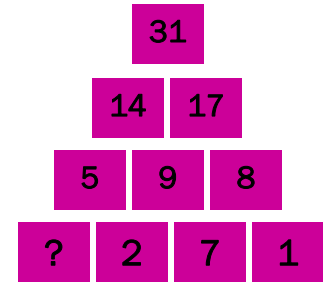


PREADVISE

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PREADVISE Update: Even though SELECT has determined that taking vitamin E and selenium doesn't help with prostate cancer prevention, that determination has not been made with regard to Alzheimer's disease. It is with your continued participation that we will ultimately be able to answer that question as well. To date, more than 7500 SELECT men have agreed to take part in PREADVISE. The PREADVISE leadership thanks you and looks forward to your continued participation.



Answer on bottom of page 2



We're on the web:

www.mc.uky.edu/preadvise

Vocabulary Builder

onomatopoeia

Pronunciation: /on-o-mat-o-PEE-a/

*1: formation of words in imitation of natural sounds 2: the use of words whose sound suggests the sense.

*The snake's "hiss," the bumble bee's "buzz," and the turkey's "gobble" are all examples of onomatopoeia

philippic

Pronunciation: /fi-LIP-ik/

n : a series of bitter verbal attacks

"In an effort to rouse his audience, the Prime Minister unleashed a merciless philippic against the nation's enemies."

poltroon

Pronunciation: /pol-TROON/

n : coward; spiritless

"A true poltroon, he was easily alarmed by the slightest noises."

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mailing label here