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Med-Sense Guaranteed Association

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At MSGA, we strive to lessen the financial burden for students and their families by offering educational scholarships via the **MSGA Scholarship Program.** MSGA provides up to 20 scholarships in the amount of \$2,500 each year to students who meet the eligibility requirements. We look at a number of different aspects when choosing scholarship recipients, including their community involvement, work history, and overall GPA. In addition, applicants must demonstrate how the scholarship funds will be used to help their academic progress and/or enhancement of their skills.

Scholarships will be awarded in the Fall for the 2017-2018 school year. Recipients must be members of the MSGA and/or a legal dependent or household relative of a member. Forty-four individual scholarships were awarded in 2016. Go to https://www.medsensemembers.com/home/scholarships/ for complete details, and watch for updates in the coming weeks.

In 2017, MSGA is also continuing to make gifts for its Nursing Scholarship Program. These gifts to nursing schools are used to provide scholarships to nursing students. If you have suggestions or recommendations, please email your comments to the Association at info@medsensemembers.com.





MSGA is proud to announce that it has provided the College of St. Mary with a gift in the amount of \$25,000 to go toward the Med-Sense Guaranteed Association Nursing Scholarship Fund. Located in Omaha, NE, the College of St. Mary is a Catholic university providing access to education for women in an environment that calls forth potential and fosters leadership. They have approximately 1,100 students.

Pictured are Dr. Maryanne Stevens, RSM, President of College of St. Mary; Lizzy Gilbert, Director of Major Gifts at College of St. Mary; and Ron Kotowski, MSGA Business Manager.

On June 29, 2017, MSGA also presented a gift in the amount of \$25,000 to St. Louis University School of Nursing. The gift has been matched 100 percent by Go Further, the University's scholarship matching program. As a result, a total benefit of \$50,000 will be provided for helping nursing school students succeed.

Pictured are Ron Kotowski, MSGA Business Manager; Jane Baum, Director of Development of the School of Nursing; Bartley Bouchein, MSGA Board Member; and Michael Higgins, Assistant Vice President for SLU Medical Center Development.

Why Do We Get Middle-Age Spread?



Did you know that the average young U.S. adult gains 30 pounds by the time they reach age 50? This weight gain happens even though most people tend to eat less over this time.

Researchers have long known that losing weight and maintaining the ability to exercise tend to get harder beginning between ages 30 and 40 – the start of mid-life. And working out pays off less than it used to.

NIH scientist Dr. Jay H. Chung and his colleagues think they've identified the biological changes that can explain this weight gain. In studies with lab animals, they found that an enzyme known as DNA-PK (DNA-dependent protein kinase) slows down your metabolism, making fat harder to burn.

The team discovered that the muscles of mice and monkeys don't show much DNA-PK activity until middle age. At middle age, the enzyme's activity spiked. Could blocking the elevated enzyme promote fat burning? To find out, the researchers used a drug that stops the enzyme from working. When fed a high-fat diet, obese mice receiving the drug didn't gain as much weight as other mice and were protected from type 2 diabetes. The drug also increased the fitness level of obese and middle-age mice.

"Our society attributes the weight gain and lack of exercise at mid-life (approximately 30 – 60 years) primarily to poor lifestyle choices and lack of will power, but this study shows that there is a genetic program driven by an overactive enzyme that promotes weight gain and loss of exercise capacity at mid-life," Chung says.

These findings were only shown in animals. And this type of drug hasn't been tested in people. It might not work for people, or could have serious side effects. Until these questions are answered, there's no magic pill to ward away the spare tire associated with middle age. In the meantime, follow your doctor's suggestions for eating right, being active, and staying fit.

References

DNA-PK Promotes the Mitochondrial, Metabolic, and Physical Decline that Occurs During Aging. Park SJ, Gavrilova O, Brown AL, Soto JE, Bremner S, Kim J, Xu X, Yang S, Um JH, Koch LG, Britton SL, Lieber RL, Philp A, Baar K, Kohama SG, Abel ED, Kim MK, Chung JH. Cell Metab. 2017 May 2;25(5):1135-1146.e7. doi: 10.1016/j.cmet.2017.04.008. PMID: 28467930.

Detect Glaucoma Early to Protect Vision

Glaucoma is a group of diseases that damage the eye's optic nerve, which carries visual signals from the eye to the brain. If left untreated, glaucoma can lead to vision loss or blindness. But many people with early-stage glaucoma have no symptoms. By the time they're diagnosed, they may have already noticed changes to their side, or peripheral, vision.

"Studies show that at least half of all people with glaucoma don't know they have this potentially blinding eye disease," says Dr. Paul Sieving, director of NIH's National Eye Institute. "The good news is that glaucoma can be detected in its early stages through a comprehensive dilated eye exam."

With early detection, glaucoma can be controlled through medications or surgery. Early treatment can protect the eyes against serious vision loss.

Anyone can get glaucoma, but some people are at increased risk. At-risk groups include African Americans ages 40 and older; everyone over age 60, especially Hispanics/Latinos; and people who have a family history of the disease.

If you're at increased risk, be sure to get a comprehensive dilated eye exam every 1 to 2 years. And encourage family members to do the same.

Struggling to Sleep? Don't Let Apnea Steal Your Sweet Dreams

Most people who have sleep apnea don't realize it. That's because this disorder only occurs during sleep.

Sleep apnea is when you have pauses in breathing while you're asleep. These pauses can last from seconds to minutes. You may have difficulty breathing a few times or dozens of times an hour.

These breathing pauses can be dangerous if they cause the oxygen level in your body to drop or disturb your sleep. When oxygen drops, your brain does whatever it can to get you to resume breathing. And then you may snore, gasp, snort loudly, or make a choking sound. A family member or bed partner might be the first to notice these disruptions in your sleep.

Sleep apnea is a common disorder. Anyone can develop it. "Sleep apnea can occur in both genders, in all races and ethnicities, and in people of all sizes and shapes," says Dr. Michael Twery, a sleep expert at NIH.

The most common type of sleep apnea is called obstructive sleep apnea. Any air that squeezes past a blocked airway can cause loud snoring. When you're awake, the muscles in your throat help keep your airway stiff and open. In adults, the throat muscles and tongue can relax during sleep, or fat tissue in the neck can narrow your airway to cause an obstruction. In children, the airway may become blocked if their tonsils are so large they obstruct the airway opening.

Breathe Easy!

Try these tips for improving your breathing when you're asleep:

Avoid alcohol before bedtime and don't take medicines that make you sleepy. They make it harder for your throat to stay open when you're asleep.

Maintain a healthy weight. Extra fat in the walls of your throat can make it narrower.

Sleep on your side instead of your back. This helps keep your throat open.

Ask your physician about medicines. Some medications can help open your nasal passages. The other type of sleep apnea is central sleep apnea. In central sleep apnea, the brain doesn't send the correct signals to your breathing muscles, so you stop breathing for brief periods.

So how can you tell whether you may have this disorder? One of the most common symptoms is excessive daytime sleepiness. "Anyone who feels so tired on a regular basis that this is a drag on their daytime function—that even if they allow enough time to get enough sleep on a regular basis and they still feel this way—then they need to discuss it with their doctor," Twery says.

Another common symptom is loud, frequent snoring. But not everyone who snores has sleep apnea. Other symptoms of sleep apnea may include feeling irritable or depressed, or having mood swings. You may have memory problems or trouble concentrating. Or, you may wake up with a headache or a dry mouth.

Your doctor can diagnose sleep apnea based on your symptoms, a physical exam, and a sleep study. For a sleep study, your doctor may send you to a sleep lab or provide a portable sleep monitor. Sleep studies record things like heart rate and oxygen level while you sleep. A sleep study can show whether apnea is mild or severe. "The largest proportion of the population with sleep apnea has mild sleep apnea," Twery explains. "Mild may or may not be associated with any daytime symptoms." People who are so sleepy that they're at risk of a drowsy driving accident are probably in the moderate to severe range.

Doctors may prescribe breathing devices that pump air or mouthpieces that adjust the lower jaw or hold the tongue. Other treatments are available and may be considered with advice from a physician familiar with your health.

Everyone deserves a good night's sleep. For self-care tips for breathing better while you're sleeping, see the "Wise Choices" box. If you feel extremely sleepy during the daytime or your bed partner says that you stop breathing when you're asleep, go talk with your doctor.

Going Gluten Free? Necessary for Some, Optional for Others

With the growing popularity of gluten-free products at your local grocery store, you may have wondered if you should avoid eating gluten. Sidestepping gluten can be a lifestyle choice for many. But for those with a condition known as celiac disease, it's a medical necessity.

Gluten is a protein found in wheat, barley, rye, and sometimes oats – ingredients often used in breads, pastas, and desserts. Some people get gas, diarrhea, or bloating after eating gluten. These symptoms could be caused by intolerance to the protein or a wheat allergy, but celiac disease is different.

When a person with celiac disease eats or drinks anything with gluten, the body's immune system attacks the inside of the small intestine. The damage from this attack keeps the body from absorbing needed nutrients. If left untreated, celiac disease can lead to malnutrition, depression, anxiety, anemia, or weakened bones. It can also delay children's growth.

Celiac disease can be hard to spot, because its symptoms can be similar to other disorders. The condition affects about 1% of people worldwide; nearly 80% of them haven't been diagnosed, says Dr. Alessio Fasano, a celiac disease specialist at Massachusetts General Hospital.

Your doctor can use a blood test to look for signs of celiac disease. Before the test, continue eating foods with gluten.



Fasano's team is studying why some people with these genes don't have symptoms. The NIH-funded researchers will follow infants who are at increased risk because a family member has celiac disease. The team hopes its findings will help doctors predict who will get celiac disease and learn how to prevent it.

People with one autoimmune disease are at increased risk for other autoimmune diseases. Because celiac disease and type 1 diabetes share risk genes, a large international study is following newborns at risk for both conditions to identify

"Celiac disease is a clinical chameleon. This creates tremendous confusion and challenging situations for both health care professionals and people who are trying to understand what's wrong with them." Dr. Alessio Fasano

Otherwise, the results may be negative for celiac disease even if you have it. Eating a regular diet can also help your doctor determine if you have a form of gluten sensitivity that is not celiac disease. Gluten sensitivity is something you may grow out of over time, Fasano explains, whereas celiac disease is a lifelong condition.

If your tests and symptoms suggest celiac disease, your doctor may confirm the diagnosis by removing a small piece of your intestine to inspect it for damage.

Genetic tests may be used to detect the genes that turn on the body's immune response to gluten. Such tests can help rule out celiac disease, but they can't be used for diagnoses; many people who have the genes never develop celiac disease. environmental factors that may trigger or protect from these diseases.

Going on a strict 100% gluten-free diet for life remains the only treatment for now. "We can't take the genes out, so we remove the environmental trigger," Fasano says.

Gluten is sometimes found in unexpected sources—such as medications, vitamins, or lip balms—so check ingredient lists carefully. The U.S. Food and Drug Administration has strict regulations for the use of "gluten-free" labels. Talking with a dietitian can also be helpful for learning about your food options.

If you suspect you may have celiac disease, talk with your doctor. Waiting too long for a diagnosis might lead to serious problems.

Staying Safe in the Household

It's almost a cliché to say that most accidents happen in the home, but the truth is that if you're not careful, you or your family can get seriously hurt just where you feel most safe. Prevent an injury – or a tragedy – by watching out for these common threats:

• Falls Make sure carpets and rugs are fastened securely, electrical cords are out of the way, and floors and staircases are clear of obstacles. Wipe up spills immediately. Install grab bars in showers and bathtubs.

• **Electrocution** Keep electrical outlets covered with safety plugs, especially if small children are about. Examine cords regularly and replace any that are worn. Keep them away from pets that might chew on them.

• **Poisoning** Keep cleaning supplies, medicines, pesticides, and any other hazardous substances locked up and out of reach of children and safely away from food preparation areas. Post the number of a poison control center near your phone.

• Fire Install smoke detectors in each bedroom, and on every floor, and keep them in good working order. Have a plan for escaping the house in case of fire, and practice it regularly.



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