

COG HEALTH QUARTERLY

MARCH 2013

INSIDE THIS ISSUE

KICK BUTTS DAY	2
NATIONAL NUTRITION MONTH	3
COLORECTAL CANCER AWARENESS MONTH	4
WORLD KIDNEY DAY	4
SPRING INTO FITNESS	6
WORLD HEALTH DAY	7
ADDRESSING COMORBIDITIES	9

SPECIAL POINTS OF INTEREST:

***Participate in our public health challenge**

***Bike to Work Week 2013**

***Healthy seasonal recipe ideas**

***Information from the Potomac River Running store**

OSTEOARTHRITIS: A GROWING EPIDEMIC

Osteoarthritis (OA) is the most common cause of disability and loss of mobility in the United States. An estimated 27 million Americans are affected by OA. According to the Arthritis Foundation, loss of mobility and function due to OA costs the U.S. economy nearly \$128 billion each year in medical care and indirect expenses, including loss of productivity and wages. Additionally, the average direct cost of OA is roughly \$2600 per year per person living with moderate OA. It is clear that OA is a problem in this country. What may not be so clear is why.

One cannot discuss the causes of OA in the United States without mentioning obesity,

which currently stands 35.7% of the total population. It is well known that the rise of obesity has led to an increase of OA. The mechanism of why this is happening, however, is not as easily explained as was previously thought.

Conventional science originally attributed the uptick in OA cases as load-bearing injuries in response to the rise of the obesity epidemic. The explanation was that people with higher BMIs are more likely to increase tension and force on load-bearing joints, most notably the knees, which in turn will become damaged over time. It is true that heavier individuals are more likely to develop OA in their lifetime. Every pound of body-

weight gained places an additional four to six pounds of pressure on the knees and hips, respectively. Overtime, the chronic stress of a high weight load causes the cartilage that cushions the bones between the joints to erode, causing pain and inflammation.

The etiology of OA is not fully understood. What is particularly puzzling to researchers is the rise of OA in non-load bearing joints such as the hands, in obese individuals. A prospective observational study published in 2006 found that after controlling for age, gender, work status, and leisure time activities, a high BMI

Continued on page 8

GREEN BEER IN MODERATION THIS ST PATRICK'S DAY

March 17th is St Patrick's Day. It is a time to celebrate with friends and family and possibly have a few pints of green beer and enjoy classic Irish dishes like corned beef and cabbage.

Over the years, however, St Patrick's Day has morphed into a day heavily revolved around drinking, becoming

one of the heaviest drinking days of the year in the United States.

According to the CDC, binge drinking is defined as 4 or more drinks on a single occasion for women, and 5 or more drinks on single occasion for men. Most people associate binge drinking as an activity of college aged kids,

which is not totally accurate. While it is true that roughly 1400 deaths each year among college students are attributed to drinking, it is important to understand that it is more than just a college phase. According to research done by the CDC, approximately two-thirds of all binge drinking is done by those over 25 years

Continued on page 2

GREEN BEER (continued)

of age.

The National Highway Traffic Safety Administration (NHTSA) reported that 32% of fatalities from motor vehicle crashes were connected to drunk driving on St Patrick's Day in 2010. NHTSA offers a few guidelines and recommendations, listed below. If you decide to indulge in a few green beers for St Patrick's day remember to do it safely and responsibly.

If you are going to an event or party:

*Designate a sober driver or have an alternate transportation plan before the party begins.

*Avoid drinking too much alcohol too fast. Pace yourself – eat enough food, take breaks, and alternate with non-alcoholic drinks.

*If you do not have a designated driver, ask a sober friend for a ride home; call a cab, friend, or family member for a ride; or just stay at the party until sober.

*Use your community's sober ride program.

*Never let a friend drive if they have had too much to drink.

*Always buckle up – it's still the best defense against other drunk drivers.

If hosting a party:

*You can be held liable and prosecuted if someone you served alcohol ends up in a drunk-driving crash.

*Ensure all of your guests designate their sober drivers in advance, or help arrange alternate transportation.

*Serve lots of food and include lots of non-alcoholic beverages at the party.

*Stop serving alcohol some time before the end of the party and begin serving coffee and dessert.

*Keep the numbers for local cab companies handy, and take the keys away from anyone who has had too much to drink.

www.nhtsa.gov

www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm

“32% of fatalities from motor vehicle crashes were connected to drunk driving on St Patrick's Day in 2010”

KICK BUTTS DAY: MARCH 20

Kick Butts Day is a national day of activism that empowers youth to stand out, speak up, and seize control against big tobacco. March 20 2013 is Kick Butts Day, and there are more than 1000 events expected in schools and communities across the United States and around the world. It is a day for teachers, youth leaders, and health advocates to attend events that raise awareness of the problem of tobacco use in their community, encourage youth to reject the tobacco industry's deceptive marketing, and to stay tobacco free. Kick Butts Day is a day to urge elected officials to take action to protect kids from tobacco.

TOBACCO FACTS

***TOBACCO USE IS THE LEADING CAUSE OF PREVENTABLE DEATH IN THE US**

***ANNUALLY, TOBACCO KILLS MORE THAN 400,000 PEOPLE AND COSTS THE US MORE THAN \$96 BILLION IN LOST PRODUCTIVITY**

***IN 2008 THE TOBACCO INDUSTRY SPENT \$9.94 BILLION ON CIGARETTE ADVERTISING AND PROMOTIONAL EXPENSES IN THE US**

***MORE THAN 303 BILLION CIGARETTES WERE PURCHASED IN THE US IN 2010**

***EACH DAY ABOUT 1000 PERSONS UNDER AGE 18 BEGIN SMOKING DAILY**

The tobacco industry focuses on marketing to children worldwide because they are three times more sensitive to tobacco advertising than adults are, and are more likely to be lifelong smokers. A third of underage smoking experimentation is attributable to tobacco company advertising and promotion.

Kick butts day is organized by the campaign for tobacco-free kids and sponsored by the United Health Foundation.

To search for activities near you or to plan your own event in your community visit www.kickbuttsday.org

NATIONAL NUTRITION MONTH

Eat Right, Your Way, Every Day™

This program encourages personalized healthy eating styles and recognizes that food preferences, lifestyle, cultural and ethnic traditions and health concerns impact individual food choices.

National nutrition month is a nutrition education and information campaign created annually in March by the Academy of Nutrition and Dietetics. The campaign focuses attention on the importance of making informed food choices and developing sound eating and physical activity habits.

The Academy of Nutrition and Dietetics shares tips to eat right for your lifestyle during National Nutrition Month, and beyond:



*Build an eating plan with your unique lifestyle and nutritional needs in mind.

*There's no one-size-fits-all way to eat that is right for everyone. If your diet doesn't fit with your lifestyle and unique needs, it won't work long-term.

*At work, keep single-serve packages of fruit, peanut butter, crackers, soup, or tuna in your desk for snacking.

*For athletes, eat a light meal or snack before you exercise, such as Greek yogurt with fruit, or granola.

*For family meals, keep things simple, build a collection of quick and easy recipes, and choose ingredients that you can use for more than just one meal. For example cook, extra grilled chicken for chicken salad or fajitas the next day.

The Academy's National Nutrition Month website includes a variety of helpful tips, games, promotional tools and nutrition education resources. Visit the site at www.eatright.org

MARCH EVENTS

Brain Injury Awareness Month

Brain injuries can happen anytime, anywhere, to anyone. 1.7 million Americans sustain brain injury each year. Learn more at www.biausa.org

National Colorectal Cancer Month

This year over 142,000 people will be diagnosed with colorectal cancer and an estimated 50,830 will die of the disease. Learn more about the disease and prevention at www.preventcancer.org/colorectal

National Kidney Month

1 in 3 Americans is at risk for kidney disease due to diabetes, high blood pressure or a family history of kidney disease. Visit www.kidney.org to learn more.

National Nutrition Month

The 2013 theme, "Eat Right, Your Way, Every Day," encourages personalized healthy eating styles. Learn more at www.eatright.org

March 18 - 22: National Youth Violence Prevention Week

The goal of the campaign is to raise awareness and to educate students, school staff, parents, and the public on effective ways to prevent or reduce youth violence. Learn more at www.nationalsave.org.

March 27: Kick Butts Day

A national day of activism that empowers youth to stand speak up against big tobacco. Learn more at www.kickbutts.org

March 26: American Diabetes Alert Day

A one-day wake-up call asking the American public to take the Diabetes Risk Test to find out if they are at risk for developing type 2 diabetes. Learn more at www.diabetes.org.

WORLD KIDNEY DAY 2013

According to The National Kidney Foundation, (TNKF), more than 5% of the adult population have some form of kidney damage, and every year millions die prematurely of cardiovascular diseases linked to Chronic Kidney Diseases (CKD).

TNKF urges the public to take basic steps to protect the kidneys on World Kidney Day on March 14, including the following:

*A low salt diet without excessive fat or calories.

*Regular exercise. Obesity and type 2 diabetes are on the rise and can often be treated and reversed with physical activity and weight loss.

*Manage and control blood pressure. High blood pressure is another leading cause of kidney disease.

*Testing for those at risk.



COLORECTAL CANCER AWARENESS MONTH

March begins colorectal cancer awareness month. Among cancers that develop in men and women, colorectal cancer is the second leading cause of cancer deaths in the United States. Every year about 140,000 Americans are diagnosed with colorectal cancer and more than 50,000 people die from it.

Research has found that the only way to reduce mortality due to colorectal cancer is to increase screening. The CDC states that if everyone who is 50 years or older were screened regularly, as many as 60% of deaths due to colorectal cancer could be avoided.

It is important to get regular screenings for specific populations. Those at greatest risk include:

***≥ 50 years:** about 9 out of 10 people diagnosed with colorectal

cancer are at least 50 years old.

***African Americans:** this segment of the population has the highest colorectal cancer incidence and mortality rates of all ethnic groups in the United States.

***Men over 60 years:** approximately 1.5% of all men over 60 years of age will develop a form of colon cancer sometime within the next 10 years

***Family history:** patients with a first-degree relative who have previously been diagnosed with colon cancer are at an increased risk of developing colon cancer

***Crohn's disease:** approximately 1.2% of Crohn's disease patients are diagnosed with a form of colon cancer.

***Ulcerative colitis:** approximately

5% of ulcerative colitis patients develop colon cancer

Regular screening for colorectal cancer should begin soon after turning 50 until the age of 75. There are several screening options to choose from. Discuss with your doctor what is appropriate for you. Types and frequencies of colorectal screenings:

***Colonoscopy:** every 10 years

***High-sensitivity fecal occult blood test (FOBT), stool test, or fecal immunochemical test (FIT):** every year

***Sigmoidoscopy:** every 5 years.

www.cdc.gov/features/colorectalawareness/

"...colorectal cancer is the second leading cause of cancer deaths in the United States"

NATIONAL PUBLIC HEALTH WEEK: RETURN ON INVESTMENT

Each year during the first week of April, since 1995, the American Public Health Association celebrates National Public Health Week (NPHW).

NPHW is a time to recognize the contributions of public health and highlight the issues that are important to the region.

This year's theme is "Public Health is ROI: Save Lives, Save money." According to their website, "The 2013 NPHW theme was developed to highlight the value of prevention

and the importance of well-supported public health systems in preventing disease, saving lives and curbing health care spending. This year, we hope you'll join us in championing the work of public health and its significant return on investment (ROI). "

As part of their mission, they provide materials and resources to spread the message and support about public health throughout the event.

Below is an exercise taken from the NPHW

website. Please fill out the bubble with what you think public health is. Check out their website for more information:

<http://www.nphw.org/>



Public Health is...



www.nphw.org

SPRINGING INTO FITNESS: RUNNING IN THE SEASON OF RENEWAL

GUEST CONTRIBUTOR: MARGIE SHAPIRO, POTOMAC RIVER RUNNING, INC.

Spring is just around the corner! It's time to start thinking about how the season of change and new beginnings affects fitness routines. Spring provides a wonderful time to revisit goals set in January or to set new ones, all the while enjoying the season's natural motivation for change and growth.

Running or walking outdoors in springtime, we enjoy the breathtaking scenery of flowers in bloom, rapidly-deepening shades of green grass, and animals and birds all around. Spring weather carries with it a host of pros and cons. The ever-increasing amount of daylight makes early morning runs or after-work jaunts much more feasible. As was the case during the winter, it is best to be safe by carrying a small light or wearing reflective clothing if you're running at dawn or at dusk. The warmer weather may provide a welcome change and the chance to do more outdoor exercise than winter may have allowed. Continue to dress in layers for outdoor running and other exercise, as temperatures can swing more during the early spring as the sun's warmth comes and goes with the daylight hours. Also, remember to

attend to your body's hydration needs: an increase in activity or warmer weather will highlight the need to drink more water both during exercise and during the day.

Sometimes spring weather provides difficult conditions for outdoor exercise. Many people suffer from allergies during this time of year – be sure to seek your doctor's advice about outdoor activity if you are prone to allergic reactions to pollen, grasses, etc. Even those highly allergic to springtime allergens often can find a way to enjoy the season outdoors with the proper treatments and precautions. If the "April showers" adage holds true this year, wet roads and trails can present mild hazards to the committed walker or runner who pounds out the miles rain or shine. If you are among the die-hard, you can make yourself more comfortable with a water-resistant outer layer and a pair of thinner socks (which will absorb less water on a very rainy run). Water resistant shoes are available, but most running shoes are so breathable that water dissipates easily from them. After a wet run, speed up the drying process for your shoes by stuffing them with newspaper (which will absorb any remaining moisture overnight). Do not put your shoes in the dryer or in front of a heat source – the extreme temperatures can warp them and harm the supportive materials of the midsole. If you are running on the trails, use caution in muddy or slippery areas, but enjoy the puddles!



Like the flowers, race season goes into full bloom beginning in early spring. If you have kept to your New Year's resolutions or have spent the winter working hard to maintain fitness, find a local road race to celebrate! Most weekends, opportunities abound to run anything from 5k to half marathon, and even longer or shorter in some cases. Check out www.prraces.com to find plenty of race options near you. Bring a friend or family member to enjoy a race morning in good company.

Whether you spent your winter honing fitness and are ready to bounce out the door into the brightness of spring, or you need the new season to kick-start a routine, use this fresh season to broaden your horizons. May health and wellness abound for you this spring!

Check the Potomac River Running Store website for more information on activities near you.
www.potomacriverrunning.com

=PR=

POTOMAC RIVER RUNNING STORE

Arlington • Burke • Cleveland Park • Loudoun County
Reston • Rockville • Tyson's Corner
www.potomacriverrunning.com

WORLD HEALTH DAY 2013



This year's World Health Day theme is High Blood Pressure. Also known as hypertension, high blood pressure increases the risk of heart attacks, strokes, and kidney failure. If left uncontrolled, high blood pressure can cause blindness, irregularities of the heartbeat, and heart failure. The risk of developing these complications is higher in the presence of other cardiovascular risk factors such as diabetes.

High blood pressure is both preventable and treatable. In some countries, prevention and treatment of the condition together with other cardiovascular risk factors, has resulted in a reduction in deaths from heart disease.

The risk of developing high blood pressure can be reduced by:

- *Reducing salt intake
- *Eating a diet consisting mostly of fresh fruits and vegetables
- *Avoiding excessive use of alcohol
- *Regular physical activity
- *Maintaining a healthy body weight
- *Avoiding tobacco use

<http://www.cdc.gov/bloodpressure/facts.htm>

BLOOD PRESSURE FACTS

***ABOUT 1 IN 3 U.S. ADULTS (68 MILLION PEOPLE) HAS HIGH BLOOD PRESSURE**

***69% OF PEOPLE WHO HAVE A FIRST HEART ATTACK, 77% OF PEOPLE WHO HAVE A FIRST STROKE, AND 74% OF PEOPLE WITH CHRONIC HEART FAILURE HAVE HIGH BLOOD PRESSURE.**

***HIGH BLOOD PRESSURE IS A MAJOR RISK FACTOR FOR KIDNEY DISEASE**

***HIGH BLOOD PRESSURE WAS LISTED AS A PRIMARY OR CONTRIBUTING CAUSE OF DEATH FOR ABOUT 348,000 AMERICANS IN 2008**

***COSTS DIRECTLY ATTRIBUTABLE TO HIGH BLOOD PRESSURE FOR THE U.S. TOTAL ALMOST \$131 BILLION ANNUALLY IN DIRECT MEDICAL EXPENSES, AND \$25 BILLION IN LOST PRODUCTIVITY**

***LESS THAN HALF (46%) OF PEOPLE WITH HIGH BLOOD PRESSURE HAVE THEIR CONDITION UNDER CONTROL**

***ALMOST 30% OF AMERICAN ADULTS HAVE PRE-HYPERTENSION**

***Facts according to the CDC**

APRIL EVENTS

National Minority Health Month

This year's theme, "Health Equity Can't Wait-Act Now in Your Community". Learn how to become involved at www.minorityhealth.hhs.gov

National Alcohol Awareness Month

Meant to increase public awareness and understanding aimed at reducing the stigma associated with alcoholism. Learn more at www.ncadd.org

March 1 - 7: National Public Health Week

The annual event "Public Health is ROI" theme was developed to highlight the value of prevention and importance of well-supported public health systems. Learn more at www.apha.org

April 7: World Health Day

Celebrated to mark the anniversary of the founding of the World Health Organization. This year's theme is high blood pressure. Learn more at www.who.org

April 20 - 27: National Immunization Week

Highlights the importance of vaccination for young children to prevent communicable disease. Learn more at www.cdc.gov/vaccines/events/niiw

April 22: Earth Day

Earth day launched in 1970, and capitalized on the emerging consciousness of putting environmental concerns front and center. Learn how to take action this Earth Day at www.earthday.org

EPIDEMIC (from page 1)

(higher than 30) was still significantly associated with increased risk of developing OA. So unless these folks were walking around on their hands all day, some other factor must be playing a role.

What researchers are beginning to understand is that the association between obesity and OA goes much deeper than simple biomechanics. Animal studies using mice have shown that high fat diets alone, similar to ones consumed by most Americans, create metabolic changes that lead to OA. The study used 2 sets of mice, one set fed a high fat diet both before and after surgery used to quickly bring on osteoarthritis, and the other set fed regular mouse food pre-surgery and high fat

mouse food post-surgery. The researchers found that both sets of mice showed changes in their joint tissue that showed progression towards OA, despite the differences in weight. They had theoretically demonstrated that metabolic changes, in the absence of gross weight gain, due to dietary intake alone were enough to cause changes in joint tissue leading to the progression of OA. The biological mechanism of the excess fat causing OA is a relatively complicated one. Scientists believe that adipocytes, or fat cells, play a large role. Chemical imbalances within the body resulting from excess food intake create a low-level inflammatory immune response

that can wear down joint tissue over time. This, in conjunction with added weight loads can result in the manifestation of OA. Doctors recommend what research has already suggested: to reduce risk of developing OA, it is important to exercise and eat right. Processed foods high in fat, sodium, and sugar contribute to weight gain. Research has demonstrated the risk of developing OA significantly drops with moderate weight loss. A woman of standard height with a BMI ≥ 25 , who loses just 11 pounds, would cut her risk of developing knee OA in her lifetime by more than 50%

www.ncbi.nlm.nih.gov/pubmed/18831740



“...the average direct cost of OA is roughly \$2600 per year per person living with moderate OA”

BIKE TO WORK WEEK 2013

May is National Bike Month, and Bike to Work Week is May 13-17, 2013.

The League of American Bicyclists began Bike to Work Day as part of Bike Month in 1956. Over the years, Bike to Work Day has grown into a widespread event with countless bicyclists taking to the streets nation wide in an effort to get commuters to try bicycling to work as a healthy and safe alternative to driving alone. In the Metropolitan Washington region, Bike to Work Day has grown from a small group of a few hundred in 2001 to over 12,000 participants in 2012.

This year the annual Bike to Work Day will be held on Friday, May 17th.

Rain or shine!

To learn more visit biketoworkmetrodc.org



ADDRESSING COMORBIDITIES: CELIAC DISEASE AND OSTEOPOROSIS

What Is It?

Celiac disease (CD) is a digestive disease characterized by intolerance to a protein found in wheat, rye and barley known as gluten. When ingested by a Celiac, gluten triggers an autoimmune response where the body attacks and destroys villi within the small intestine. The villi, which are tiny, finger-like protrusions in the small intestine, increase the surface area within the digestive tract and allow for better absorption of the nutrients from the small intestine to the blood stream. Over time, undiagnosed CD can result in malnutrition from the

destruction of this inner lining of the small intestine, which are vital for absorption of key nutrients. CD is one of the most common digestive diseases in the United States. According to a recent report by the Division of Gastroenterology and Hepatology at the Mayo Clinic, the prevalence of CD in the total US populations stands at roughly .71% (or 1 out of 141 individuals). The report also indicated that 83% of participants in the study who tested positive for CD were previously unaware of their diagnoses, with a median age of 45 years at diagnosis.

Mechanism of Disease

Midlife stage diagnoses, such as the one described in the study, are disconcerting for public health professionals and clinicians alike. Repeated exposure to gluten over time in undiagnosed CD patients results in variety of early morbidities and can lead to serious manifestations of disease. The destruction of the villi can cause chronic inflammation in the digestive tract, which can result in developing one of several forms of cancer including colorectal cancer and intestinal lymphomas. Additionally, the constant



Continued on page 11

MAY EVENTS

Arthritis Awareness Month

Arthritis and osteoarthritis are the leading causes of disability in the United States. Learn more at www.arthritis.org

National Celiac Disease Awareness Month

Celiac Disease is one of the most common autoimmune genetic conditions in the United States. To learn more, visit www.americanceliac.org

Mental Health Month

Mental Health Month began in 1949 to raise awareness of mental health conditions and mental wellness for all. To learn more about mental health visit their website at www.nmha.org

National Employee Health and Fitness Month

A national and international observance of health and fitness in the workplace. The goal of the event is to promote the benefits of a healthy lifestyle to employers and their employees. Learn more at www.healthandfitnessmonth.com

May 13 - 17: National Bike to Work Week

Bike to work on May 17. Join over 10,000 area commuters for a celebration of bicycling as a clean, fun and healthy way to get to work. Attend one of 70 pit stops throughout DC, MD and VA to receive a free t-shirt, refreshments, and be entered into a raffle for a free bicycle. Learn more at www.biketoworkmetrodc.org

IMRPOVE YOUR POSTURE THIS MAY

May is Correct Posture Month, sponsored by the American Chiropractic Association (ACA). Poor posture affects many of us. The health results from poor posture include muscle tension, stiffness, backaches, neck cramps, and fatigue. It seems that Americans contribute to their back pain by the way they sit, exercise, work, and sleep.

Talk to your doctor or chiropractor about ways to alleviate postural habits that can negatively affect your health. In the meantime, see below for tips on improving your posture:

At the office:

*Ensure your chair fits correctly, with 2 inches between the front edge of your seat and the back of

your knees

*Sit with your knees at between 90 – 120 degree angles

*Keep your feet on the floor or on a footrest

*Keep your knees at or below the level of your hips

*Rest your elbows and arms on your chair or desk, keeping your shoulders relaxed and forearms parallel to the ground

*Position your computer monitor so that the top of the screen is at or below eye level

*Keep your wrists in a neutral position as you type, not angled up or down

*The mouse pad should be close to the keyboard so you don't have to reach or hold your arm

away from the body

*Take frequent short breaks from your work; stretch your hands, arms, shoulders and legs during your breaks

While standing:

*Place most of your weight at the balls of your feet

*Keep knees slightly bent

*Keep feet shoulder-width apart

*Let arms hang naturally down the sides of the body

*Stand straight and tall with shoulders pulled back

*Tuck in your stomach

*Keep earlobes in line with shoulders

While sleeping:

*Find the right mattress that works for you

*Sleep with a pillow

*Avoid sleeping on your stomach

*Sleeping on your side or back is more helpful for back pain

*If sleeping on your side, place a pillow between your legs

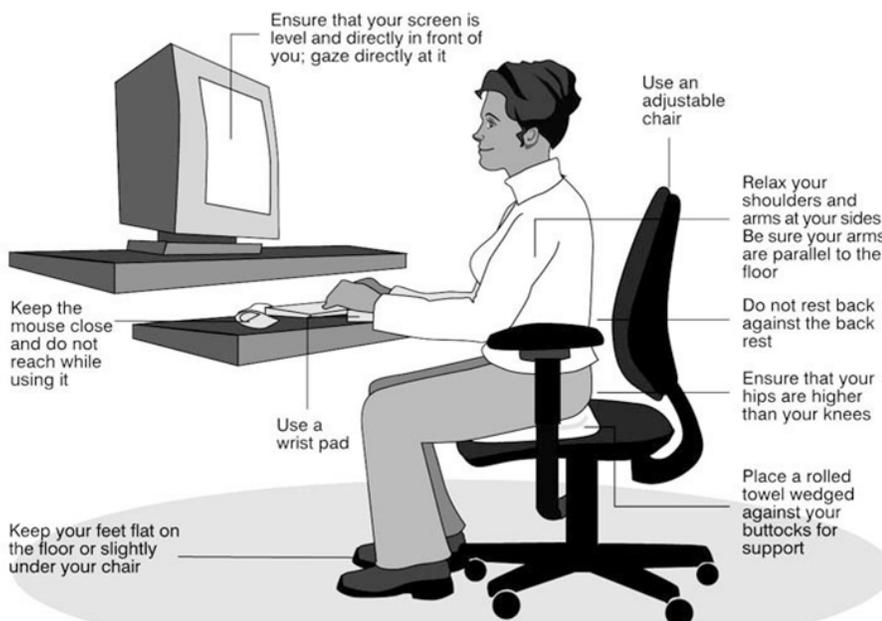
*If sleeping on your back keep a pillow under your knees

http://www.acatoday.org/content_css.cfm?CID=1452

http://www.acatoday.org/content_css.cfm?CID=623

<http://www.vacupractor.com/wordpress/wp-content/uploads/good-posture.jpg>

TIPS FOR PROPER POSTURE WHILE AT A WORKSTATION



COMORBIDITIES (continued from page 9)

under absorption of nutrients can lead to decreased bone density and anemia. Research published in JAMA in 2005 tested for CD among a cohort of mostly postmenopausal white women, 266 with osteoporosis and 574 without osteoporosis. Among those with clinically diagnosed osteoporosis, 3.4% tested positive by serological screening and biopsy testing for CD, compared to just .2% positive for CD without osteoporosis. Additionally, the biopsy revealed that higher the levels of antibodies associated with the autoimmune response detected in the biopsy correlated with a more severe form of osteoporosis.

The association between CD and osteoporosis is well known, however, the biological mechanism and disparity in the severity osteoporotic conditions some patients experience is less well understood. Research has suggested however, that 20% of CD patients produce antibodies that attack a key protein that helps to maintain bone health. Celiac patients tested in the study produced antibodies that

disabled the protein osteoprotegerin (OPG). The OPG protein regulates bone resorption and acts as a soluble factor in the regulation of bone mass. The disruption by antibodies in some CD patients confounds this process, resulting in severe osteoporosis, in addition to the nutrient losses already occurring due to malabsorption. The research also showed that these CD patients cannot be treated for mineral loss with dietary supplements such as vitamin D and calcium, but they can be treated using drug therapies.

Next Steps

Data shows that the prevalence of CD is continually increasing. Some argue that this is due to advancements in screening methods and increased clinical awareness about the disease. However, a recent study comparing preserved blood samples collected 50 years ago with age-matched controls samples from the time of the study suggests otherwise. The investigators found that CD was roughly 4 times more common in the age-matched samples when compared to the older

blood samples. Investigators suggested the increase in prevalence of CD is most likely due to a combination of factors including the hybridization of wheat using chemical processes and the “hygiene theory”, which can be explained as an absence of infectious agents and bacteria in our modern, clean environment, resulting in under stimulation of the developing immune system. The immune system then turns on itself, resulting in the dramatic increases autoimmune conditions and allergic conditions we see today.

Whatever the cause, it is clear that the prevalence of CD is increasing. Clinicians and public health officials alike need to seriously consider suggesting broad screening for CD within at-risk populations including most notably, post-menopausal women with osteopenia. Without proper management, these patients could potentially lose years of healthy life due to a manageable condition.

www.celiac.nih.gov/prevalence.aspx

www.archinte.jamanetwork.com/article.aspx?articleid=486428

www.webmd.com/digestive-disorders/celiac-disease/news/20050228/celiac-disease-testing-may-help-osteoporosis

www.sciencedaily.com/releases/2009/10/091007171735.htm

www.discoverysedge.mayo.edu/celiac-disease/index.cfm

www.ncbi.nlm.nih.gov/pubmed/22850429

www.digestive.niddk.nih.gov/ddiseases/pubs/celiac/



We want to hear from you!
Email suggestions to health@mwco.org

Brought to you by the Health and Substance
Abuse Programs,
Department of Public Safety and Health



METROPOLITAN WASHINGTON Council of Governments

In the Next Issue:

- *Men's Health
- *Global Impacts of Sickle Cell Anemia
- *Addressing Comorbidities: Alcoholism and Hepatitis
- *National Breastfeeding Month

Broccoli-Tomato Galette

This rustic pie takes up less space in the fridge or freezer than a typical pizza



- *4 plum tomatoes, halved and seeded
- *3 cloves garlic, sliced
- *1 Tbs. chopped fresh oregano
- *4 cups broccoli florets
- *1/2 small onion, sliced (1/2 cup)
- *4 tsp. olive oil
- *1 12-oz. pkg. prepared whole-wheat pizza dough, at room temperature
- *1/4 cup prepared pesto
- *1/2 cup shredded fontina cheese

1. Preheat oven to 450F. Line baking sheet with foil. Place tomato halves cut side up on baking sheet. Insert 2 slices of garlic in each tomato half; sprinkle with oregano. Roast 30 minutes.

2. Toss together broccoli, onion, and oil in baking dish. Roast 20 minutes, or until tender. Cool 10 minutes.

3. Roll dough into 10-inch circle. Transfer to baking sheet coated with cooking spray or lined with parchment paper. Spread pesto on crust; sprinkle with cheese. Top with vegetables, leaving 2-inch rim. Fold 1 inch of crust edge inward. Reduce oven temperature to 375F; bake 40 minutes, or until golden.

Recipe from Vegetarian Times

BIKE TO WORK DAY 2013 FRIDAY

MAY 17

COMMUTER CONNECTIONS



Marriott

ICF



WHOLE FOODS

capital bikeshare



Bike Arlington

LOCAL HISTORY CITY OF ALEXANDRIA, VIRGINIA

TWINBROOK

BicycleSPACE



DigitalGlobe

ExpressLanes



ABUS



BicyclePASS



TIMBUK2



REGISTER AT BIKETOWORKMETRODC.ORG OR CALL 800-745-7433

Pre-Register by May 10 for Free T-Shirt* and Bike Raffle!

FREE FOOD, BEVERAGES AND GIVEAWAYS AT ALL LOCATIONS

Visit biketoworkmetrodc.org for specific pit stop locations and times. *T-Shirts available at pit stops to first 12,000 who register.

70 Bike to Work Day pit stops located in D.C., Maryland, and Virginia



Bike to Work Day is also funded by the District of Columbia, Maryland, Virginia and U.S. Departments of Transportation.

Printed on recycled paper