

EFFORTS



Emphysema Foundation For Our Right To Survive

Emphysema Takes Your Breath Away

Mid-Summer 2010

SAVE YOUR BREATH

Thanks to a heads-up from Edna Fiore, EFFORTS Executive Board member from Colorado who is active in all aspects of COPD, one of the nicest things to happen this summer has been the publishing of a Guide to Eating Well for People with COPD.

Elizabeth Page, BS, RRT, AE-C, who is Respiratory Wellness Coordinator at Yavapai Regional Medical Center has produced a wonderful booklet called SAVE YOUR BREATH. I tried to find something to excerpt for this issue of the newsletter, but the whole publication is just wonderful.

I guess I am mostly excited because I have other co-morbidities that each require a special 'diet,' and this publication covers all of them - Low fat, sugar, sodium - and I will try to pick out some topics that interest me - hard to do! They all interest me!

- Purpose of this Guide
- What difference can nutrition make
- COPD, Carbon Dioxide, Carbohydrates and Breathing
- Eat well to support health
- Reduce chronic inflammation and infection
- Sodium swaps
- Sugar substitutes
- How to improve your diet

The recipe section is short but sweet! Elizabeth has put a lot of effort into this Guide and told me that information on ordering it should be on the website, which is undergoing improvements, within a couple of weeks. www.yrmc.org



CALCIUM SUPPLEMENTS: TOO MUCH OF A GOOD THING?

Negative health effects linked to taking too much supplemental calcium are on the rise, according to a commentary appearing in an upcoming issue of the Journal of the American Society Nephrology (JASN). The incidence of the so-called milk-alkali or calcium-alkali syndrome is growing in large part because of widespread use of over-the-counter calcium and vitamin D supplements.

The milk-alkali syndrome arose in the early 1900s when patients ingested abundant amounts of milk and antacids to control their ulcers. This practice increased individuals' risk of developing dangerously high levels of calcium in the blood, which could cause high blood pressure and even kidney failure. The incidence of the milk-alkali syndrome declined when newer ulcer medications became available, but it appears to be on the rise again thanks to increased use of over-the-counter calcium and vitamin D supplements used mainly as preventive and treatment measures for osteoporosis.

In many cases, patients with the syndrome require hospitalization.

Stanley Goldfarb, MD and Ami Patel, MD (University of Pennsylvania School of Medicine) recommend changing the name of the milk-alkali syndrome to the calcium-alkali syndrome because the condition is now associated with a large intake of calcium, not milk. Postmenopausal women, pregnant women, transplant recipients, patients with bulimia, and individuals who are on dialysis have the highest risks of developing the calcium-alkali syndrome due to various physiological reasons.

According to the authors, the obvious preventive strategy against the calcium-alkali syndrome is to limit the intake of calcium to no more than 1.2 to 1.5 grams per day. "Calcium supplements taken in the recommended amounts are not only safe but are quite beneficial. Taken to excess is the problem," said Dr. Goldfarb. "Even at the recommended dose, careful monitoring of any medication is wise and yearly determinations of blood calcium levels for those patients taking calcium supplements or vitamin D is a wise approach," he added. <http://tinyurl.com/24vp36h>



POLLUTION, TEMPERATURE AND SLEEP-DISORDERED BREATHING

Researchers from Brigham and Women's Hospital and the Harvard School of Public Health have established the first link between air pollution and sleep-disordered breathing (SDB), a known cause of Antonella Zanobetti, Ph.D., Susan Redline, MD, MPH, Diane Gold, M.D., M.P.H. and colleagues explored the link between air pollution levels, temperature increases and sleep-disordered breathing using data from the Sleep Heart Health Study, which included more than 6,000 participants between 1995 and 1998, and EPA air pollution monitoring data from Framingham (Massachusetts), Minneapolis, New York City, Phoenix, Pittsburgh, Sacramento, and Tucson.

The study appears online ahead of the print edition of the American Journal of Respiratory and Critical Care Medicine on the American Thoracic Society's Web site.

SDB affects up to 17 percent of U.S. adults, many of whom are not aware that they have a problem. Air pollution is also an endemic issue in many of the nation's urban areas. Both SDB and pollution have been associated with a range of health problems, including increased cardiovascular mortality. "The influence of air pollution on SDB is poorly understood," said Dr. Zanobetti. "Our hypothesis was that elevation in ambient air pollution would be associated with an increased risk of SDB and nocturnal hypoxia, as well as with reduced sleep quality." The researchers further

hypothesized that seasonal variations in temperature would exert an independent effect on SDB and sleep efficiency.

To test their hypotheses, the researchers used linear regression models that controlled for seasonality, mean temperature and other factors known to be associated with SDB, such as age, gender and smoking.

To examine the role of seasons, they performed a separate analysis, adding the interaction of season with the level of air pollution in the form of particulate matter under 10 m, which is commonly associated with traffic. They evaluated long-term effects by computing the moving 365-day average of PM10. In total, they included more than 3,000 individuals in their analysis.

"We found novel evidence for pollution and temperature effects on sleep-disordered breathing," said Dr. Zanobetti. "Increases in apnea or hypopnea...were associated with increases in short-term temperature over all seasons, and with increases in particle pollution levels in the summer months."

Over all seasons, the researchers found that short-term elevations in temperature were associated with increased in Respiratory Disturbance Index (RDI), which was used to gauge the severity of SDB. In the summer, increases in PM10 were also associated with an increase in RDI (representing a 12.9 percent increase), as well as with an increase in the percent of time that blood oxygen saturation levels fell below 90 percent (representing a nearly 20 percent increase) and a decrease in sleep efficiency. There were no such statistically significant associations of particulate pollution with SDB in other seasons. This is the first study to link pollution exposure and SDB.

"Particles may influence sleep through effects on the central nervous system, as well as the upper airways," wrote Dr. Zanobetti. "...Poor sleep [associated with poor health outcomes] may disproportionately afflict poor urban populations. Our findings suggest that one mechanism for poor sleep and sleep health disparities may relate to environmental pollution levels."

Other research has found an association between elevation in pollution and increased risk of sudden infant death syndrome (SIDS). There is a known overlap between etiologic factors for SIDS and SDB. Given the results of the current research, "the mechanisms that increase the risk of SIDS in associations with ambient pollutants may be similar to the mechanisms that underlie the risk of SDB..., [which] may include pollutant-associated effects on central or peripheral neurotransmitters that influence sleep-state stability," said Dr. Zanobetti.

Several studies have also reported that temperature predicts mortality. "The association we found between short-term temperature and RDI could represent one possible mechanism by which changes across the range of temperature could predict mortality," said Dr. Zanobetti.

Perhaps most importantly, the prevalence of SDB in the United States may increase as obesity rises. "While therapies are available for the disorder, the majority of adults with SDB are not being treated and many people are resistant to therapy," said Dr. Zanobetti. "Along with reduction in obesity, these new

data suggest that reduction in air pollution exposure might decrease severity of SDB and nocturnal hypoxia and may improve cardiac risk."

John Heffner, M.D., past president of the American Thoracic Society observed, "This study gains even greater importance as scientists increasingly demonstrate the critical importance of sleep to health and well being. SDB increases risks for cardiovascular disease, strokes and other major health conditions. Air pollution is an independent contributor to most of these disorders and may produce its negative health effects by promoting SDB as an intermediary step in the pathway toward disease."

This study was funded by the National Heart Lung and Blood Institute, the National Institute of Environmental Health Sciences and the Environmental Protection Agency.

<http://tinyurl.com/23zvc8a>



SHORT PEOPLE AT HIGHER RISK FOR HEART PROBLEMS

Short people are at greater risk for heart disease than tall people, according to a new study.

Tuula Paajanen of the University of Tampere in Finland analyzed 52 studies involving more than 3 million people and found that short adults were about 1.5 times as likely to develop heart disease and to die from it than tall people. This was true for both men and women, the researchers reported in the European Heart Journal. Anyone shorter than 5 feet, 3 inches was considered short. Anyone taller than 5 feet, 7 inches was considered tall.

Although there have been previous studies indicating that short people might be at increased risk for heart disease, the new analysis is the first systematic review of the medical literature.

Short people may be at increased risk because they have smaller arteries supplying blood to their hearts, which get clogged more easily. Or it could be that their shortness indicates they were malnourished or had some kind of infection early in life that retarded their growth and also put them at increased risk for heart problems.

<http://tinyurl.com/27842kp>



NEW FORMULA GIVES FIRST ACCURATE PEAK HEART RATE FOR WOMEN

Equation offers different exercise heart rate for women and better predicts heart risk

Women who measure their peak heart rates for exercise will need to do some new math as will physicians giving stress tests to patients.

A new formula based on a large study from Northwestern Medicine provides a more accurate estimate of the peak heart rate a healthy woman should attain during exercise. It also will more accurately predict the risk of heart-related death during a stress test.

"Now we know for the first time what is normal for women, and it's a lower peak heart rate than for men," said Martha Gulati, M.D., assistant professor of medicine and

preventive medicine and a cardiologist at Northwestern Medicine. "Using the standard formula, we were more likely to tell women they had a worse prognosis than they actually did."

Gulati is the lead author of a study published June 28 in the journal *Circulation*.

"Women are not small men," Gulati added. "There is a gender difference in exercise capacity a woman can achieve. Different physiologic responses can occur." Gulati was the first to define the normal exercise capacity or fitness level for women in a 2005 study.

The old formula -- 220 minus age -- used for almost four decades, is based on studies of men. The new formula for women, based on the new research, is 206 minus 88 percent of age.

At age 50, the original formula gives a peak rate of 170 beats per minute for men and women. The new women's formula gives a maximum heart rate of 162 beats for women. Many men and women use their peak heart rate multiplied by 65 to 85 percent to determine their upper heart rate when exercising.

"Before, many women couldn't meet their target heart rate," Gulati said. "Now, with the new formula, they are actually meeting their age-defined heart rate."

The new formula is trickier to calculate, Gulati acknowledged, but is easily determined with a calculator. She currently is working on an iPhone application for a quick calculation.

The new formula is based on a study of 5,437 healthy women ages 35 and older who participated in the St. James Women Take Heart Project, which began in the Chicago area in 1992.

With the new formula, physicians will more accurately determine if women are having a normal or abnormal response to exercise. "If it's abnormal, that's a marker for a higher risk of death," Gulati said. "Maybe we need to talk about whether you exercise enough and what we need to do to get it into the normal range."

"We need to keep studying women to get data applicable to women," Gulati said. "It's important to not get complacent that we have data on men and assume women must be the same. They're not."

Gulati's senior author on the study was Morton Arnsdorf, M.D., professor emeritus and associate vice chairman of medicine and former section chief of cardiology at the University of Chicago. Arnsdorf died in a motor vehicle accident in June.

"I feel fortunate to have been his student, have him take me under his wing and be my mentor," Gulati said. "He was an amazing mentor." The Women Take Heart Project study had been sitting dormant, and Arnsdorf encouraged her to open it to do more research, Gulati said.

<http://tinyurl.com/2d6kshm>



AIR POLLUTION MAY HELP TRIGGER CARDIAC ARREST

The dirtier the air, the more likely people are to

suffer sudden cardiac arrest, new research from Australia shows.

Particulate matter -- tiny specks of soot, dust, and other pollutants in the air that can be breathed deep into the lungs -- has been "consistently" linked to increases in deaths from heart disease and clogged arteries, Dr. Martine Dennekamp of Monash University in Melbourne and her colleagues note. But studies looking at whether air pollution specifically ups the risk of heart attack or cardiac arrest have had mixed results.

Airborne particles are harmful to people with existing health problems, the researchers add, but they could also trigger heart attack or even sudden death in people with no apparent symptoms of cardiovascular disease.

To investigate, Dennekamp and her team looked at 8,434 cases of sudden cardiac arrest among people 35 and older that occurred in metropolitan Melbourne between 2003 and 2006.

After a rise in concentration of the tiniest airborne particles (particles less than 2.5 microns across, known as PM2.5), the likelihood of cardiac arrest rose, and stayed higher than average for two days. For every 4.26 micrograms per cubic meter increase in PM2.5 concentrations, the risk of cardiac arrest was 4 percent higher than average for the next 48 hours.

An individual's risk of suffering sudden cardiac arrest is quite low; the American Heart Association estimates that there's about one cardiac arrest per 2,000 people every year in North America. And the study does not prove that pollution causes more cardiac arrests, as the researchers did not find out whether participants in the study also smoked or had other risk factors for heart disease.

Carbon monoxide levels also were associated with increases in cardiac arrest risk, although the effect wasn't as strong as it was for PM2.5. None of several other pollutants the researchers measured, including larger airborne particles, affected risk. The effect was strongest for people 65 to 74 years old, and weakest for those 75 and older.

Australia currently has an "advisory standard" limiting PM2.5 concentrations to 25 micrograms per cubic meter or less, the researchers note.

Given that an increase of less than 5 micrograms per cubic meter was tied to significant health effects, they add, "the present study suggests an increase in the risk of cardiac effects at concentrations below the current air quality standards in Australia."

<http://tinyurl.com/278hbpz>



CAN A HEALTH FORECASTING SERVICE OFFER COPD PATIENTS A NOVEL WAY TO MANAGE THEIR CONDITION?

Objectives: The UK Meteorological Office (Met Office) has developed a health forecasting service for chronic obstructive pulmonary disease (COPD) patients, combining a rule-based model predicting risk based on environmental conditions with an anticipatory care intervention providing

information on self-management and warnings via an interactive telephone call. Our aim was to explore the acceptability and utility of such a service to patients with COPD and its perceived impact on their behavior and disease management.

Methods: A cross-sectional questionnaire survey of service users drawn from 189 general practices in England, Scotland and Wales at the end of the winter of 2007/8.

Results: Completed questionnaires were received from 3288 COPD patients, representing a response rate of 40%.

Eighty-five percent of those returning a questionnaire reported at least one exacerbation during the study period and 8% had been admitted to hospital on one occasion or more. The majority of respondents deemed the information pack (comprising a booklet and thermometers) useful while the automated calls were generally said to be convenient, easy to understand and reassuring. Those less satisfied with the service felt they were already sufficiently aware of the prevailing weather conditions or felt more detailed information was needed. Most benefit was reported by those patients who were willing to be pro-active in the management of their condition, with the service encouraging 36% of respondents to seek a repeat prescription, 28% to re-read their information pack and 12% to consult their GP for worsening of symptoms.

Conclusions: Patients found the automated interactive calling, combined with a health risk forecast, both viable and useful, welcoming the information and tools it offered. In many cases, it added to patients' understanding of their illness and promoted better self-management. Future research should focus on the potential impact of the service in terms of health outcomes and cost-effectiveness.

<http://tinyurl.com/27gut7h>



CAN DIET INFLUENCE BARRETT'S ESOPHAGUS?

Barrett's esophagus is a serious condition that increases the risk of esophageal cancer. It is most commonly found in patients with gastroesophageal reflux disease, or GERD. Because diet is linked to conditions that worsen GERD, researchers are studying the relationship between the foods we eat and the increased risk of developing Barrett's esophagus.

The esophagus is the pathway that carries foods and liquids from the mouth to the stomach. Normally, the esophageal mucosa is lined with multiple layers of flattened, scalelike cells. When someone has GERD (persistent reflux that occurs more than twice a week), acid from the stomach is refluxed up into the esophagus, damaging the lining. Barrett's esophagus occurs when the cells in the lining are replaced by a single layer of cells that are more resistant to acid, a process called metaplasia.

While GERD affects about 10 to 20% of Americans, Barrett's esophagus affects only about 1% of adults in the United States. The average age at diagnosis is 50 and men develop the condition two to three times as often as women.

Over time, the cells affected by Barrett's esophagus can continue to multiply, a condition called dysplasia which can lead to esophageal adenocarcinoma. Patients with Barrett's

have a 30 to 40-fold greater risk of developing esophageal cancer.

According to a study in the American Journal of Epidemiology, diet may play a role in the development of Barrett's esophagus. Those who consumed primarily a "Western" diet that was high in meat, fast food, soft drinks and coffee, were at a 65% higher risk of developing Barrett's than those on a more "health conscious" diet which was high in fruits and vegetables, non-fried fish, and tofu.

Because Barrett's esophagus does not cause any symptoms, physicians recommend that patients older than 40 who have a history of GERD for a number of years undergo an upper gastrointestinal endoscopy with biopsies to check for the condition.

Patients with GERD or Barrett's are encouraged to eat a diet that is low in fat, high in whole grains, and provides at least five to nine servings of fruits and vegetables. Avoid foods that trigger reflux symptoms to reduce the amount of acid that reaches the esophagus and damages cells.

<http://tinyurl.com/27nxlgj>



DIET SODA MAY PREVENT SOME KIDNEY STONES

Kidney stones form when the urine contains more crystal-forming substances, such as calcium, uric acid, and oxalate, than the body can dilute with the available fluid. Most kidney stones contain a combination of calcium and oxalate. According to new research published in the June issue of the Journal of Urology, drinking diet soda may present the most common type of kidney stones.

Researchers from the University of California, San Francisco and their colleagues conducted a study to determine whether any commercially available drinks could help to prevent kidney stones. They found that diet versions of citrus-flavored sodas contain relatively high amounts of citrate, a compound which is known to inhibit the formation of calcium oxalate kidney stones. Some people are at a higher risk for kidney stones because their urine contains low levels of citrate, so these sodas might serve as a form of citrate supplementation. Although dark colas have little or no citrate, citrus-flavored sodas such as Diet Sunkist Orange, Diet 7Up, Sprite Zero, Diet Canada Dry Ginger Ale, Sierra Mist Free, Diet Orange Crush, Fresca, and Diet Mountain Dew, contain moderate amounts of citrate.

Potassium citrate supplements have long been used as a treatment for preventing calcium oxalate kidney stones. Based on this new research, citrus-flavored sodas might be useful in preventing kidney stones among people with low urinary levels of citrate, as well. However, further research is needed to determine whether drinking these sodas actually prevents formation of kidney stones, so it is still too early to advise those who suffer from kidney stones to drink these sodas as a form of preventive treatment.

<http://tinyurl.com/25dv5bl>



STEM CELL NETWORK RAISING AWARENESS OF 'ROGUE' CLINICS

It's "irresponsible and despicable" that many overseas clinics are purporting to offer stem cell treatments for people with illnesses without any scientific evidence, says the head of Canada's Stem Cell Network.

A study group report released Tuesday by the International Society for Stem Cell Research aims to educate those who might be tempted, by providing criteria for people to evaluate claims made by hundreds of these so-called "rogue" clinics around the world. "There's been so much excitement around stem cell research and with good reason -- it offers tremendous hope to cure many devastating diseases that currently there's no treatment for, but we're not there yet," Drew Lyall, executive director of the Stem Cell Network, said from Ottawa. Clinics and companies are "preying on the desperate and the vulnerable, and taking as much money as they can from them in the process," he said.

The report recommends that each clinic be evaluated on whether it's been approved by a research ethics board in its jurisdiction, and whether it's been approved by an internationally recognized national oversight body.

Potential patients and their families who might be thinking about an overseas trip can submit the names of clinics to the ISSCR on a new website so that they can be evaluated. The website www.closerlookatstemcells.org provides guidance on which illnesses or injuries are amenable to stem cell therapy. And it has a list of questions that patients and their physicians should consider asking if they're contemplating the therapy.

"Around the world, really the only proven treatments relating to stem cells are for blood -- using blood stem cells to treat various blood disorders, predominantly various types of cancer -- and some wound healing with some skin treatments, and there's been some work done with the cornea," said Lyall. "But above and beyond that there's not really a whole lot that's been proven. And if you go to the websites of many of these companies you'll see that they're claiming to cure Parkinson's disease, claiming to cure Alzheimer's, cure cerebral palsy -- and there's just no scientific evidence for that."

Timothy Caulfield, director of the Health Law Institute at the University of Alberta, said it's difficult to know the extent of the stem cell tourism phenomenon.

"There are clinics in China, for example, that claim they've seen as many as 6,500 patients, perhaps as many as 10,000," he said. "So there seems to be a demand, and ... it seems the individuals that go are often quite desperate."

There are no official records, he said, but studies of patient blogs and media reports indicate patients often include both adults and children with neurological disorders and spinal injuries.

According to clinic websites, they claim to cure just about anything from erectile dysfunction to cancer, Caulfield said. "Worse case scenario, they are using the excitement around stem cell research to exploit very vulnerable individuals in the population. Best case scenario, they're naively applying therapies that don't appear to have -- even though they may

have the best interests of the patients at heart -- don't appear to have evidence to support their use."

Lyall said he's not aware of any such clinics in Canada. "Health Canada has certainly been trying to keep on top of that situation," he said, adding that stem cell therapy clinics can be found in China, Central America, Russia, Europe and the United States. "What we're more concerned about are Canadians who are considering going abroad for treatments, and trying to provide them with some information which will allow them to make informed decisions."

Experts don't know exactly what's being injected into patients at unregulated clinics. "It could be saline. In many cases, you'd actually hope it would be saline because at least it would do no harm," Lyall said. "We've heard of everything from stem cells derived from non-human sources to embryonic stem cells are sometimes advertised. And embryonic stem cells, if they're injected directly into a patient, could be very harmful indeed."

Joyce Gordon, president and CEO of the Parkinson Society Canada, welcomed the report. The society's offices across Canada receive inquiries about the usefulness of stem cells in treating the disease, she said in a statement. "Since Parkinson's is one of the diseases unsupported by clinical evidence for these treatments, the new resource will provide more critical information so people can evaluate the claims by overseas clinics." <http://tinyurl.com/2evzfos>



VITAMIN E LOWERS COPD RISK IN WOMEN

If you are a woman, 45 years or older, you may want to start taking more vitamins, specifically, vitamin E. Why?

Researchers at Cornell University and Brigham and Womens' Hospital found that women who supplemented their diet regularly with vitamin E lowered their risk of COPD by about 10 percent. According to study results, this applies to smokers and non-smokers alike.

Vitamin E, a powerful antioxidant, may protect the lungs from inflammation and free radicals, both of which contribute to the damage caused by lung disease. The findings, according to Anne Hermetet Agler, doctoral candidate with Cornell University's Division of Nutritional Sciences, suggest that increasing vitamin E actually prevents COPD. Women in the study took 600 IU of vitamin E every other day.

While this is promising news for COPD, vitamin E was found to have no affect on asthma and the benefits were limited to only women. Further research is forthcoming to assess the beneficial effects of vitamin E supplementation in men.

Also, remember to check with your health care provider before taking any kind of supplement, even if it is a vitamin.

<http://tinyurl.com/2efzk6p>



WEIGHT OF THE OBESITY EPIDEMIC. *Rising Stroke Rates Among Middle-Aged Women in the United States*

Background and Purpose— Recent US nationally representative data revealed that among individuals aged 45 to 54 years, women's stroke prevalence was double that of men's. The purpose of this study was to determine if the sex disparity existed previously.

Methods— We assessed sex-specific stroke and vascular risk factor prevalence among individuals aged 35 to 64 years who participated in the National Health and Nutrition Examination Surveys (NHANES), a cross-sectional, nationally representative survey conducted in 2 waves: 1988 to 1994 (n=7234) and 1999 to 2004 (n=6499).

Results— Women aged 35 to 54 years who participated in NHANES from 1999 to 2004 were 3 times more likely to have experienced a stroke compared with similarly aged women in NHANES 1988 to 1994 (1.8% versus 0.6%, P=0.003), but stroke prevalence among men did not change (0.9% versus 1.0%, nonsignificant). Among women, the prevalence of obesity (15.2% versus 17.9%, P=0.08), morbid obesity (12.8% versus 17.5%, P=0.003), abdominal obesity (47.4% versus 58.9%, P<0.0001), hypertriglyceridemia (22.91% versus 26.78%, P=0.035), and hypertension (33.04% versus 37.43%, P=0.03) was lower in NHANES 1988 to 1994 compared with the more recent NHANES wave. Higher waist circumference was the only independent stroke risk factor for women aged 35 to 54 years in NHANES 1999 to 2004 (OR per 15-cm increase in waist circumference=1.02, 95% CI 1.00 to 1.04).

Conclusions— Stroke prevalence among women aged 35 to 54 years has tripled over the past 2 decades, at the same time remaining stable among men. Prevalence of obesity and 3 metabolic syndrome components increased; they may be key factors in the increase in women's stroke prevalence.

<http://tinyurl.com/24v6o7e>



COPD PATIENTS MAY BE OVER TREATED WITH STEROIDS *Study Shows Lower-Dose Steroid Treatment May Be as Effective as High-Dose*

More than 90% of acutely ill people who are hospitalized for chronic obstructive pulmonary disease (COPD) receive high doses of IV steroids, even though lower-dose oral steroids may be just as effective, a study shows.

The findings appear in the June 16 issue of *The Journal of the American Medical Association*.

COPD is a progressive, debilitating lung disease that makes it increasingly hard to breathe. Symptoms include coughing, wheezing, shortness of breath, and chest tightness. COPD is the fourth leading cause of death in the U.S., and one of the 10 leading causes of hospitalizations.

"In sharp contrast to the leading clinical guidelines, the vast majority of patients hospitalized for acute exacerbation of COPD were initially treated with high doses of corticosteroids administered intravenously," conclude study researchers led by Peter K. Lindenauer, MD, of Baystate Medical Center in Springfield, Mass. This practice is not associated with "any measurable benefit and at the same time exposes patients to the risks and inconvenience of an intravenous line, potentially unnecessarily high doses of steroids, greater hospital costs, and longer lengths of stay."

Steroids are considered to be a beneficial way to treat acute exacerbations of COPD, but the best dosages and the best way to deliver them is not fully understood. Most clinical guidelines recommend treatment with 20 milligrams to 60 milligrams of prednisone (an oral steroid) once daily.

Researchers looked at how steroids were used among people hospitalized for COPD at more than 400 hospitals during 2006 and 2007. They then compared outcomes among patients treated with oral steroids and patients who received higher doses of IV steroids during the first two days of their hospitalization for COPD.

Fully 92% of 79,985 patients were treated with high-dose IV steroids, compared with 8% who received oral steroids, the study shows. Overall, 1.4% of people treated with IV steroids died while they were hospitalized, compared with 1% of those who received oral steroids.

Researchers also developed a composite measure or a combination of several outcomes that together indicate treatment failure. This composite measure included mechanical ventilation after day two and death in the hospital or readmission within 30 days after discharge. The researchers found that 10.9% of patients in the IV group failed treatment, compared with 10.3% of people in the oral steroid group.

Patients treated with oral steroids also had shorter hospital stays and less cost associated with treatment, compared to patients who received IV steroids.

Second Opinion

"Providers need to keep up on the guidelines," says Richard A. Mularski, MD, a clinical investigator and a pulmonologist at Kaiser Permanente Center for Health Research in Portland, Ore. Mularski is a co-author of an editorial that accompanied the new study.

Mularski speculates that doctors may reach for the bigger guns -- IV steroids -- because they view them as a more effective way to treat COPD. But "steroids are not without significant side effects, especially for hospitalized [patients], and you would want to avoid this by giving the right amount and not too much," he says.

Bigger is not always better when it comes to COPD treatment, says Neil Schachter, MD, a professor of pulmonary medicine and medical director of the respiratory care department at Mount Sinai Center in New York City.

"IV steroids have no benefit over the less expensive oral steroids in terms of hospital stays and mortality," he says.

When asked by WebMD if this study could change practice, Schachter says "while I don't think that this study

will immediately change how doctors treat exacerbations, it certainly puts the spotlight on the need to refine criteria for IV steroid therapy."

But "these guidelines are guideposts, not laws," he says. "The changing recommendations and the need to individualize treatment make doctors reluctant to embrace every new study or guideline as soon as it is published," he says.

"I use inhaled and oral steroids in the patients I see in my office," Schachter says. "If someone is in severe distress in my office, I might give them an injection of steroids to rapidly relieve symptoms, knowing that there could be a significant delay if they have to go home and obtain oral medication from a pharmacy. Many of the patients with a COPD exacerbation come through the emergency room where they are given IV steroids as a reflex."

He says that one of the presumed criteria for admission to the hospital is that they need IV treatment. "Once they are on IV steroids, there may be an inertia to switch to oral medication as the exacerbation is brought under control," he says, adding that most of these individuals are already on oral steroids when they arrive at the emergency room.

<http://tinyurl.com/29gnesw>



BEET JUICE BEATS HIGH BLOOD PRESSURE

The nitrate content of beet juice will lower your blood pressure, and it takes only a small amount -- 250 milliliters -- to do it. A recent study found that people who drank beetroot juice experienced the same lowered blood pressure benefits within 24 hours as those who took nitrate tablets.

The research will be welcome news to patients with high blood pressure who might now have a natural approach to reducing their risk of cardiovascular disease, including stroke and heart attack.

Study author Amrita Ahluwalia, professor of vascular biology at Queen Mary's William Harvey Research Institute, explained that the nitrate found in beetroot juice was the cause of its beneficial effects on cardiovascular health and worked by increasing the levels of the gas nitric oxide in the circulation. Professor Ahluwalia was quoted as saying, "We gave inorganic nitrate capsules or beetroot juice to healthy volunteers and compared their blood pressure responses and the biochemical changes occurring in the circulation."

"We showed that beetroot and nitrate capsules are equally effective in lowering blood pressure, indicating that it is the nitrate content of beetroot juice that underlies its potential to reduce blood pressure. We also found that only a small amount of juice is needed -- just 250 ml -- to have this effect and that the higher the blood pressure at the start of the study, the greater the decrease caused by the nitrate. Our previous study two years ago found that drinking beetroot juice lowered blood pressure; now we know how it works," she said.

The results of the study could pave the way for a natural approach to lowering blood pressure that ultimately may help reduce the massive burden of cardiovascular disease on the National Health System.

<http://tinyurl.com/25xkgej>

HANDY HINTS

When you're stressed or anxious, you subconsciously clench your jaw and teeth; this strains the muscle that connects your jaw to your temples and can trigger a tension headache.

A solution: "Put a pencil between your teeth but don't bite," says Fred Sheftell, MD, director of the New England Center for Headache in Stamford, CT. You automatically relax your jaw muscle to do this, which can prevent the pain.

To refresh tired or puffy eyes, place used tea bags in the refrigerator for fifteen minutes. Place on closed eyes for a few minutes.

To get rid of the smell on your dog, instead of using expensive dog shampoos, use a tomato (or use tomato puree in the same way as you would use regular dog shampoo) this will rid your dog of its smell for about six months and your dog will love you for it.

Hiccups - Peanut Butter is a sure fire cure! Swallow a tablespoon of it and it prevents the esophagus from contracting.

Add one cup of water to the bottom portion of the broiling pan before putting it in the oven. The water will absorb the smoke and grease and make the food more tender.

Forgot to buy long matches for candle lighting, etc., use a piece of dry spaghetti. It's long enough to reach every area.

To remove soap scum when washing plastics (such as shower curtains or plastic tablecloths) add a little water softener to the final rinse.

For stains in your sink--especially rust or coffee--try making a paste of salt and lemon juice or a full strength solution of hydrogen peroxide. Leave it on the stain for several minutes then flush well with water.

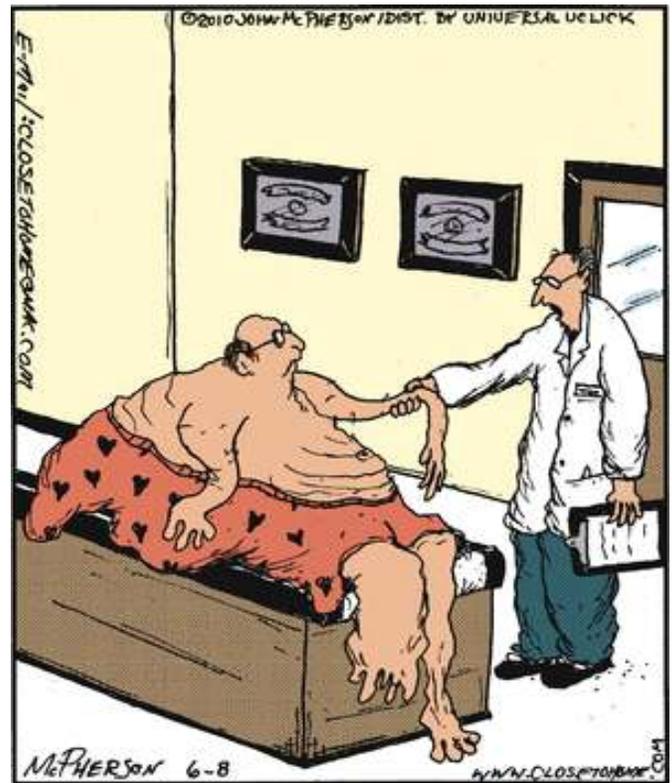
To determine whether an egg is fresh, immerse it in a pan of cool, salted water. If it sinks, it is fresh - if it rises to the surface, throw it away.

The classic breath freshener—and powerful antiseptic—can also do a number on blisters. Moisten a cotton ball with Listerine and dab it on your blister 3 times a day until the area dries out and no longer hurts.

Dandruff - Dissolve 10 aspirins (5 grains each) in 1 cup warm water. Massage into scalp for about 10 minutes. Rinse thoroughly. Add a vinegar rinse as an extra help after rinsing aspirin out completely. Use after every shampoo if necessary for a while.



Information in this newsletter is for educational purposes only. Always consult with your doctor first about your specific condition, treatment options and other health concerns you may have.



"You need more calcium."

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