

# EFFORTS

*Emphysema Foundation For Our Right To Survive*



Emphysema Takes Your Breath Away

July 2006

## THE BREATHING ROOM

### *A major, innovative COPD awareness program.*

The breathing room, designed to use creative sights and sounds to explain the symptoms of copd, is a multimedia traveling exhibit that features in-depth disease management and educational information.

Highlighting the exhibit is a three-dimensional, animated, interactive lung model which illustrates the difference in breathing and lung function between healthy lungs and copd compromised lungs.

When the lung model starts with healthy lungs, you will feel a cool breeze and hear the sounds of normal breathing. As the lung model progresses to diseased lungs, the breeze will stop, and you will hear the sounds of persistent coughing, combined with the labored sounds of the breathlessness of a person with copd.

Staffed by physicians, respiratory therapists, and other healthcare professionals, the breathing room will allow the public and patients to learn more about lung health and copd.

Minneapolis, Mall of America, July 15, 10:30 - 6:30pm  
60 East Broadway, Bloomington, Mn 55425

Chicago, Orland Square Mall, July 29, 10:30 to 6:30pm  
W 151st St and S La Grange Rd, Orland Park, Il 60462

Further dates and sites to be announced



## **SPIRIVA® CONSISTENTLY REDUCES EXACERBATIONS AND ASSOCIATED HOSPITALIZATIONS IN PATIENTS WITH COPD - META-ANALYSIS OF CLINICAL STUDIES SHOWS**

Patients with chronic obstructive pulmonary disease (COPD) treated with Spiriva® (tiotropium) for 6-12 months experienced significantly fewer exacerbations and hospitalizations compared with patients receiving placebo according to an analysis of pooled studies presented today at the International Conference of the American Thoracic Society (ATS). Spiriva® is the first and only once-daily, inhaled anticholinergic medication for maintenance treatment of COPD.

COPD is a progressive respiratory illness that causes significant deterioration of lung function and chronic breathlessness. 600 million people worldwide already live with COPD, but its prevalence is predicted to rise to become the world's third leading cause of death by 2020. COPD

exacerbations, or an acute worsening of disease symptoms, may accelerate the progression of COPD.

“These results underline the benefit of effective treatment for patients who suffer with COPD and exacerbations,” said Dr David Halpin, Consultant Physician and Senior Lecturer in Respiratory Medicine at the Royal Devon and Exeter Hospital, UK, and study investigator of the pooled analysis.

“Exacerbations of COPD significantly reduce a patient's quality of life, and are a major cause of hospitalization, disability and death. Preventing and treating exacerbations is a key goal of COPD management.”

The post hoc analysis was performed on nine, completed, randomised, placebo-controlled, parallel-group Spiriva® studies with a duration of six months to one year. Exacerbations were uniformly defined across all studies as an increase in, or new onset of at least two of the following: cough, sputum, wheezing, dyspnea, or chest tightness with a duration of three days requiring treatment with antibiotics or systemic steroids, or hospitalization. 171 COPD patients were included in the analysis. Results showed, compared with placebo:

- Spiriva® significantly reduced the exposure-adjusted incidence rate of COPD exacerbations by 22.6%
- Spiriva® significantly reduced the exposure-adjusted incidence rate of associated hospitalizations by 21.3%
- Time to first exacerbation and hospitalization was also prolonged with Spiriva®

.....Source: medicalnewstoday.com



## **COPD WILL COST U.S. OVER \$800 BILLION OVER NEXT 20 YEARS**

Over the next 20 years, medical costs related to chronic obstructive pulmonary disease (COPD) will total approximately \$832.9 billion in the United States, according to a study to be presented at the American Thoracic Society International Conference on May 22nd.

The study, which used a mathematical model to estimate future costs related to COPD, found that the disease will cost \$176.6 billion in the U.S. over the next five years, and \$389.2 billion over the next 10 years. The study is part of the Burden of Obstructive Lung Disease (BOLD) initiative, which is designed to examine the prevalence and burden of COPD around the world.

COPD is the fourth leading cause of death in America, claiming the lives of 120,000 Americans in 2002. An estimated 10.7 million U.S. adults have COPD, but there may be many more undiagnosed cases. Smoking is the primary risk factor for COPD—approximately 80 to 90% of COPD deaths are caused by

smoking. In spite of declining tobacco use in the United States, prevalence of COPD is expected to increase because of the lag time between tobacco exposure and disease development.

“As the prevalence of COPD continues to grow, the costs associated with the disease will continue to rise and are projected to consume a significant portion of the healthcare budget over the next 20 years,” says lead researcher Todd Lee, PharmD, PhD, Research Assistant Professor at Northwestern University in Chicago and Hines VA Hospital.

To figure out future COPD health costs, the researchers started with the \$31.4 billion in medical expenses attributed to COPD in 2003. They then divided the adult population into groups, based on whether they were current, former or never-smokers, and whether they had mild, moderate or severe COPD. They attached a dollar amount to the healthcare needs of each group. They then projected how many people would move from one group to another each year over 20 years, based on their age, gender and smoking history—such as how many smokers would develop mild COPD and how many people with moderate COPD would develop a more severe form of the disease—and calculated the new costs for each year. They totaled the amounts for 20 years to come up with the staggering \$832.9 billion figure.

“One of the reasons we developed this model was to raise awareness about the cost of COPD in the future, and make healthcare decision-makers realize the impact that COPD has,” said Dr Todd. “It’s a real eye-opener, and hopefully it will lead to more discussions about what we should be doing now that will have an impact 20 years down the road, such as a greater emphasis on smoking prevention and cessation.” The researchers next plan to use the model to estimate the impact of platensimycin. Source: Science News Online

## DOCTORS MUST HELP COPD PATIENTS QUIT SMOKING

Despite the risks, more than 36 percent of patients suffering from chronic obstructive pulmonary disease (COPD) are still smoking, a new study says. “It doesn’t look like a good part of the [COPD] population is getting the information it needs from health-care providers,” lead researcher Jeannine Schiller, a statistician with the U.S. Centers for Disease Control and Prevention, said in a prepared statement.

COPD includes chronic lung diseases like emphysema and bronchitis, and affects more than 13.5 million Americans. Symptoms include shortness of breath, coughing and productive cough. The biggest risk factor for COPD is smoking, and it will cause flare-ups and the disease to worsen. Almost 23 percent of the smokers in the study with COPD said that their doctor did not talk to them about quitting smoking within the last year, or offer them suggestions to help them quit. Doctors are instructed to talk to all smokers about their tobacco use at every visit, according to U.S. Public Health guidelines, and to give them advice on how to quit.

Results of the study, which was conducted on over 175,000 adults over age 25, showed that although nearly half of the people studied with COPD tried to quit smoking, only 14.6 percent were successful. Patients aged 65 and older were

more likely to successfully quit smoking, although younger smokers were more likely to try to quit. The majority didn’t use any supplements to help them quit. “I didn’t realize how many people stop cold turkey, and I was surprised at how few use medicines and patches,” Schiller said.

The study included six years of compiled data taken from federal surveys conducted between 1997 and 2002. Results were published in the July issue of the American Journal of Health Promotion. ..Source: Health Behavior News Service



## HOSPITAL CARE OF PATIENTS WITH COPD VARIES WIDELY AND NEEDS IMPROVEMENT OVERALL

In a study of nearly 70,000 patients hospitalized for chronic obstructive pulmonary disease (COPD), only 33 percent of the patients received ideal care (Improving Patient Care, p. 894). Ideal care was defined as receiving all five care elements recommended by American College of Physicians and American College of Chest Physicians joint guidelines and receiving none of five tests considered to be of uncertain or no benefit or even harmful.

Individual hospital performance varied widely: fewer than 10 percent of patients received ideal care at some hospitals while more than 60 percent of patients at other hospitals got ideal care.

The authors say their study points to specific interventions—for example, increasing use of recommended tests and treatments and omitting useless ones—that would “reduce large variations in practice between institutions and ... improve care nationally.” ....Source: medicalnewstoday.com



## ILL EFFECTS OF INACTIVITY REVERSIBLE WITH EXERCISE

Couch potatoes can lower their risk of developing heart disease, diabetes and other health conditions, if they start spending as much time exercising as they previously spent being inactive, new study findings suggest. In the study, men and women whose health and fitness deteriorated when they volunteered to be physically inactive for six months, had a complete reversal of most of the subsequent deterioration in health measures when they increased their activity level during the next six months.

“Inactivity is worse than we thought,” study co-author Jennifer L. Robbins, an exercise physiologist at Duke University in Durham, North Carolina, told Reuters Health. Yet, she said, “a little bit of activity can make a big difference.” Robbins presented her team’s findings during last week’s annual meeting of the American College of Sports Medicine, held in Denver, Colorado.

“Although exercise is known to enhance health and wellness, the extent to which one can reverse the debilitating effects of physical inactivity is unknown,” Robbins and her associates note in materials provided at the meeting.

To look into that issue, they studied mildly overweight but otherwise healthy individuals who had been assigned to a comparison group of a previous exercise study, in which they were instructed to not make any changes in their diet or exercise level—i.e. to continue their normal pattern of inactivity—for a



**“The handle on your recliner does not qualify as an exercise machine.”**

six-month period. These participants afterwards elected to follow the study's exercise program for an additional six months. During their period of inactivity, the men and women experienced deterioration in 12 of the 17 variables studied, including their waist size, how quickly they became exhausted while using a treadmill, and their visceral fat, or the amount of fat surrounding their internal organs—a known predictor of cardiovascular disease.

After six months of exercise, however, the 33 study participants decreased their waist size, lost weight, exercised longer before becoming exhausted on a treadmill, lowered their cholesterol and otherwise improved in 13 of the 17 variables studied, according to Robbins and her team. The exercise returned these variables to "normal"—i.e. to the levels measured before the initial study began—or even led to improvements beyond those initial levels. "It's promising to know with a similar period of activity, health parameters can be reversed," Robbins said.

What's more, study participants who fared the worst during the sedentary period also experienced the greatest improvement during the exercise program, the researchers note. This is good news for men and women who recently gained weight, according to Robbins. "They may indeed be the ones who have the most benefit" from increasing their level of physical activity, she said. The study findings indicate that "it only takes a small amount of activity to make a difference and to keep cardiovascular risk factors at a manageable level," Robbins said. "Something's better than nothing and more is better than less, generally," she added...Source: HealthDay News



## **INTERNATIONAL TASKFORCE PUBLISHES CRITICAL ACTIONS REQUIRED TO REDUCE IMPACT OF COPD EXACERBATIONS**

Global experts in respiratory disease have called for an immediate increase in efforts to improve the treatment and management of COPD exacerbations. The 'call' follows heightened political interest in the disease in the UK following recent announcements by the Health Secretary and Chief Medical Officer. The Exacerbations Taskforce, an international multidisciplinary group of respiratory experts,

has published its recommendations in the latest issue of the Primary Care Respiratory Journal.

The group hope their recommendations will achieve stronger implementation of evidence-based guidelines by healthcare professionals; improving care for the estimated 1.5 million people in the UK with clinically relevant COPD. The Health Secretary highlighted recently that COPD is the number one cause of unplanned hospital admissions in this country, yet the respiratory condition remains a preventable and manageable disease.

“The average hospital stay due to COPD is now more than 10 days per visit”, said Professor David Price, Professor of Primary Care Respiratory Medicine, University of Aberdeen. “In addition, over one in three of these patients are readmitted within three months. Earlier diagnosis and improved management for patients' exacerbations as well as improved prevention would help reduce the strain these admissions place on already stretched resources.”

The Exacerbations Taskforce, which is sponsored by an educational grant from GlaxoSmithKline, is calling for the following :

- Increased awareness that many COPD exacerbations can be prevented or treated
- Increased patient knowledge about their disease and provision of clearer terminology to define and explain exacerbations
- Development of 'pathways' for the prevention and treatment of exacerbations
- Provision of model programs for multidisciplinary care
- Greater use of spirometry in smokers and patients suspected of COPD, in particular those with a history of frequent exacerbations

Professor Bart Celli, chair of the Exacerbations Taskforce commented, “Our five key steps were developed to identify proactive ways of bridging the gap between evidence-based guidelines for the treatment and prevention of exacerbations, and current clinical practice. Given the growing global burden of COPD and consequently COPD exacerbations, immediate action is required to ensure that exacerbations are either prevented or are appropriately diagnosed and treated.”

COPD is now the fourth leading cause of death in the UK, claiming over 22,000 lives annually. Exacerbations are a key factor in the downward spiral of ill health and are largely responsible for the vast majority of the 106,000 admissions, which cost the NHS a staggering £253m a year. Prompt diagnosis and early intervention are crucial to reducing the impact of exacerbations and improving patient outcomes.

Despite the availability of many clinical practice guidelines and medications for the prevention and treatment of exacerbations, around 50% of exacerbations remain unreported and consequently untreated. As a result, many patients do not access the treatment needed to manage their condition and prevent further episodes. In March 2006, the Health Secretary, Patricia Hewitt published new figures from the NHS Institute for Innovation and Improvement to illustrate how the NHS could improve services, reduce unnecessary emergency admissions and improve value for money. COPD was listed as the number one

'ambulatory care sensitive' condition, accounting for over 106,000 admissions, and costing the NHS £253m a year. In his 2004 annual report, On the State of the Public Health (published 19 July 2005), The Chief Medical Officer emphasized the burden of COPD and called for a National Service Framework for COPD.

.....Source: [www.medicalnewstoday.com/](http://www.medicalnewstoday.com/)



## LUNG CANCER MIGHT BE OVERDIAGNOSED

### *Preventive screening may be showing too many false-positives, study says*

Thorough preventive screening measures for lung cancer may be identifying too many abnormalities as cancerous, a new study says. Participants in the Mayo Lung Project who had been previously diagnosed with lung cancer were interviewed about their diagnosis, overall health, and smoking history. Researchers also reviewed the results of the patients' chest scans. Patients were divided into two groups -- one where patients were screened with multiple chest X-rays, and one where spectrum tests were used. Of the 7,118 patients studied, 585 in the X-ray group were identified as having cancer, and 500 were identified in the spectrum test group. The researchers said the additional cancers identified in the X-ray group point to an overdiagnosis of lung cancer.

"Although the magnitude of overdiagnosis in chest X-ray screening appears to be modest, the very real and deleterious role that overdiagnosis plays in mass screening cannot be discounted," Pamela M. Marcus, a researcher with the National Cancer Institute, said in a prepared statement. "The newest imaging technologies can detect very small lung abnormalities, but these abnormalities may be clinically unimportant. The question remains as to whether early detection of lung cancer through mass screening results in a net benefit to the public's health."

Overdiagnosis can lead to unnecessary tests and treatment of a disease that may result in exposure to harmful toxins, the researchers said

.....Journal of the National Cancer Institute



## LUNG FUNCTION TEST UNDERUSED IN PATIENTS WITH COPD

At least two thirds of patients with chronic obstructive pulmonary disease (COPD) do not receive lung function testing that is recommended for the accurate diagnosis and effective management of the disease, suggesting that the majority of patients are diagnosed with COPD based on symptoms alone. New research published in the June issue of CHEST, the peer-reviewed journal of the American College of Chest Physicians (ACCP), finds that only one third of patients recently diagnosed with COPD underwent spirometry, a noninvasive lung function test, to confirm COPD or to manage their condition. Current national guidelines recommend spirometry for the diagnosis and management of COPD.

"Spirometry testing is necessary for the diagnosis and staging of COPD, yet the majority of patients with COPD are being diagnosed based on symptoms and smoking history,"

Todd A. Lee, PharmD, PhD, Hines VA Hospital, Hines, IL, Northwestern University Feinberg School of Medicine, Chicago, IL. "While these patients may indeed have COPD, spirometry is needed to make a definite diagnosis. As a result, patients who do not have COPD may be receiving unnecessary chronic therapy."

Lee and colleagues examined the use of spirometry among 197,878 patients (98 percent men) from the Veterans Health Administration (VHA) health-care system who were newly diagnosed with COPD. Patient records were reviewed for the general use of spirometry and spirometry related to exacerbation or surgery over a 12-month period. Of the patients, 33.7 percent had at least one spirometry through the VHA over the course of a year. A random sample of 6,000 patients revealed an additional 4.3 percent of patients underwent spirometry in non-VHA settings. Among patients who experienced acute exacerbation of COPD, spirometry was performed only 21.4 percent of the time, despite current guidelines that recommend spirometry four to six weeks after an exacerbation. Spirometry was used most frequently around surgical procedures that required general anesthesia, with 85.5 percent of patients having spirometry performed 30 days or less before their procedure.

A pulmonary clinic visit was the factor that had the highest association with having a spirometry test. Patients seen by a pulmonologist were three times more likely to have a spirometry test than those with no pulmonary visit. Younger age was significantly associated with the likelihood of having spirometry performed. Compared to patients younger than 50 years old, the likelihood of having a spirometry performed was 18 percent lower in those 60-69 years, 32 percent lower in those 70-79 years, and 48 percent lower in those 80 years or older. In addition, mental health and substance abuse diagnosis were also associated with lower likelihood of having spirometry performed.

"Providers may be more reluctant to use spirometry in older patients because of concerns about the validity and acceptability of the test results," said Dr. Lee. "Providers also may be interested in a definitive diagnosis for younger patients that are experiencing symptoms associated with COPD and thus refer these patients for spirometry." Although the role of spirometry in routine clinical practice remains unclear, researchers believe there is a need to increase the training and use of lung function testing in the primary care setting.

"COPD is a highly preventable disease most commonly caused by long-term smoking," said W. Michael Alberts, MD, FCCP, President of the American College of Chest Physicians. "Symptoms of COPD may not be noticeable for several years, making it difficult to diagnose and treat the disease in its early stages. Lung function testing for smokers and other high-risk patients may help with early identification of COPD and more effective disease management."

.....Source: American College of Chest Physicians



## MEDICARE WILL REIMBURSE HEART PATIENTS FOR TWO WELLNESS PROGRAMS THAT FOCUS ON WHOLESALE CHANGES.

***Supporters see the move as a shift toward proactive***

***care.*** Lifestyle changes can boost the health and well-being of heart patients, proponents of such programs have long said. Now Medicare has acknowledged that as well. The federal insurance program will now pay for the intensive cardiac rehabilitation plans created by preventive health guru Dr. Dean Ornish and mind-body medicine pioneer Dr. Herbert Benson — the first time the federal government has agreed to reimburse consumers for specific lifestyle intervention programs. "This exciting breakthrough could change the face of medical care," said Ornish in a statement.

He and Benson have been working for years to obtain Medicare reimbursement for their cardiac wellness programs because it's seen as a critical first step to making their programs more widely available — and getting other insurance providers to pay for them as well. Both have conducted clinical research demonstrating that comprehensive lifestyle changes — including support groups; good nutrition and low-fat diets; exercise; and stress management, such as yoga, meditation or deep breathing — may begin to reverse even severe coronary heart disease without drugs or surgery. Ornish's Program for Reversing Heart Disease is offered at eight sites in Pennsylvania and at five medical centers in West Virginia. At least one private insurer in each state already has agreed to cover the programs in those states.

Cardiac wellness programs by Benson, who more than 25 years ago wrote the groundbreaking "Relaxation Response," are offered in Indiana, Rhode Island, Tennessee, Washington and Virginia. Considered by many to be the father of meditation in this country, Benson has shown that 10 minutes of meditative technique a day can increase concentration and counteract the harmful effects of stress, such as high blood pressure and strokes. His Cardiac Wellness Program combines these stress reduction techniques with nutrition, cognitive restructuring and exercise to lower cholesterol and blood pressure. Patients report fewer symptoms of chest pain.

Medicare, however, will not cover enrollment in the programs for as long as both centers frequently recommend. Instead, it will guarantee coverage for 36 sessions within an 18-week period, with a possible extension to 72 sessions for 36 weeks. The final details of how much will be covered are still under negotiation, Ornish said. Although Medicare already pays for some cardiac rehabilitation programs, officials hailed the inclusion of both programs as an important shift toward preventive rather than rehabilitative medicine.

As of March, the definition of who can take advantage of the cardiac rehab benefit under Medicare has been expanded from conditions such as acute myocardial infarction (heart attack) and coronary artery bypass graft to include patients with less severe heart conditions, such as valve replacement. "The programs of Dr. Ornish and Dr. Benson focus on a prevention model," said a spokesperson with the Centers for Medicare and Medicaid Services. "Now we are going to take even individuals with mild cardiovascular disease and show them how to ameliorate it or reverse it to avoid more serious disease."

Although the details of coverage have not been finalized, doctors who run similar lifestyle intervention programs to treat and prevent heart disease supported the move. "It is just phenomenal that Medicare has decided to cover these programs since Medicare sets the precedent for all of the other insurance companies," said Dr. Mimi Guarneri, a cardiologist who co-founded and runs the Scripps Center for Integrative Medicine in La Jolla. "What's really important is this is truly shifting the paradigm of healthcare from focusing on chronic disease to focusing on prevention."

.....Source: Los Angeles Times



**MORE THAN HALF OF PATIENTS IDENTIFIED AS HAVING COPD - CHRONIC BRONCHITIS AND EMPHYSEMA - WERE MISDIAGNOSED OR TREATED AS HAVING ASTHMA, RECENT PRIMARY CARE STUDY SHOWS**

***New Findings Highlight Under-Recognition and Under-Treatment of America's Second-Leading Cause of Disability -***

A new study shows that more than half of patients with COPD—chronic obstructive pulmonary disease—may be misdiagnosed as having asthma. COPD is a progressive condition that leads to a worsening of respiratory symptoms, a decline in lung function and increased disability; however, it tends to be under-diagnosed and under-treated. The study results, published in the Journal of Asthma, are from the most recent prospective, patient-reported, objectively documented COPD study to examine COPD misdiagnosis.

COPD, which includes chronic bronchitis and emphysema, is characterized by a loss of lung function over time. Primarily a disease of current and former smokers, COPD affects nearly 12 million Americans. Unlike asthma, COPD is associated with a cascade of decline that leads to a diminished quality of life over time. "Millions of people live with COPD for years, so their inability to do the things they enjoy because they simply can't breathe is devastating," said the study's lead author, David G. Tinkelman, M.D., Vice President for Health Initiatives, National Jewish Medical and Research Center, Denver. "We need to clarify the differences between COPD and asthma so patients get the right diagnosis early and the appropriate interventions needed to change the course of this growing health crisis."

The study, conducted in Denver and Aberdeen, Scotland, and sponsored by Boehringer Ingelheim Pharmaceuticals, Inc. and Pfizer Inc, analyzed data from 597 patients age 40 and older with a history of lung disease or recent treatment with respiratory medications. Patients were then screened using spirometry, a lung function test, to confirm their diagnosis of COPD. In this study, a COPD diagnosis was defined in agreement with American Thoracic Society and European Respiratory Society guidelines as the presence of obstruction -- inability to get air out of the lungs -- based on spirometry results.

Of the 235 patients diagnosed with COPD by spirometry, 51.5 percent reported a prior diagnosis of asthma only. Only 37.9 percent of participants diagnosed with COPD based on the study tests reported a previous diagnosis of the disease, while 10.6

percent reported no prior diagnosis of COPD or asthma. "These findings are surprising given the availability of credible diagnosis and treatment guidelines specifically for COPD," noted Dr. Tinkelman. "Only through proper diagnosis and treatment will COPD patients fully benefit. Patients can benefit from lifestyle modification, pulmonary rehabilitation and proper pharmacotherapy that may help them breathe better and return to the activities they enjoy."

COPD is second-leading cause of disability and the fourth-leading cause of death in the U.S. While COPD is primarily caused by cigarette smoking, other causes of COPD include exposure to occupational dusts and chemicals. Researchers have also found a link between COPD and a rare genetic disorder involving a deficiency in the enzyme alpha1-antitrypsin (AAT) that normally prevents loss of elasticity in the lungs' fibers. The most common COPD symptoms include shortness of breath, chronic cough (sometimes with phlegm), and wheezing. In mild COPD, patients experience breathlessness during high-energy activities, such as exercise. As the disease worsens to the moderate and severe stages, patients become breathless more frequently, avoiding activities that cause shortness of breath. This can lead to physical deconditioning -- loss of muscle strength -- and disability. Patients eventually become breathless, even at rest. COPD accounts for a high proportion of health-care costs -- nearly \$40 billion in the U.S. In the last 20 years, COPD was also responsible for nearly 50 million hospital visits nationwide. COPD is, however, a manageable disease.) According to diagnosis and treatment guidelines set by the Global Initiative for Chronic Obstructive Lung Disease (GOLD), intervention can help improve and prevent some of the symptoms of COPD and improve health status and patient outcomes.

.....Source: PR Newswire



## **MUHC RESEARCHERS LINK ASTHMA DRUGS AND CATARACTS IN SENIORS**

Researchers from the MUHC have found that elderly patients with chronic obstructive pulmonary disease (COPD) and asthma who take medication to prevent their attacks face an increased risk of developing cataracts. Their findings, which looked at a large group of Quebecers, are released today in the June issue of the *European Respiratory Journal*.

"We found that people over the age of 65 who take a cortisone-like medication called inhaled corticosteroids (ICS) to lower their risk of asthma or COPD attacks are actually raising their risk of developing cataracts," says MUHC epidemiologist Dr. Samy Suissa and senior author of the study. "This important information to physicians and patients will help in the management of patients using these drugs"

The researchers looked at 14 years of diagnostic and prescription information from a provincial health database, studying more than 100,000 patients with asthma or COPD with the average age of 78, over 10,000 of whom were subsequently diagnosed with severe cataracts.

The team found a 24 percent increase in the risk of developing a severe cataract for those subjects taking a typical

daily dose of ICS. Even at half the daily dose, the researchers found a small increase in the risk of cataracts, a condition that clouds or darkens the lens of the eye and, when left untreated, can permanently blur vision.

The findings lead the researchers to put forth a word of warning: "We recommend that elderly asthma sufferers keep using these very effective medications, but make efforts to reduce the dose of ICS as much as possible," said Dr. Suissa, who is also a professor in McGill University's Department of Epidemiology and Biostatistics. He suggests that if seniors do have to take ICS, they use the medication in combination with other drugs that open up the bronchial tubes such as long-acting bronchodilators or anti-leukotrienes. For patients with COPD, however, the message is clear: given the limited efficacy of ICS in COPD, we recommend avoiding their use altogether.

.....Source: medicalnewstoday.com



## **NEW APPROACH ALLOWS CLOSER LOOK AT SMOKER LUNGS**

Aided by a powerful imaging technique, scientists have discovered they can detect smoking-related lung damage in healthy smokers who otherwise display none of the telltale signs of tobacco use.

Researchers at the University of Wisconsin-Madison were able to probe deeper into smokers' lungs by tracking the movement in the respiratory organs of a harmless gas known as helium. Helium can be inhaled and visually detected via the widely used diagnostic technique known as magnetic resonance imaging (MRI), which produces high-contrast images of the body's soft tissues. The use of helium is a departure from traditional MRI, which typically distinguishes body tissues from one another by tracking differences in water content.

Writing in the journal *Radiology*, the UW-Madison scientists suggest that in comparison to existing imaging methods, the helium-based approach could enable doctors to assess lung health more accurately, as well as spot smoking-associated diseases much sooner. "It's one thing to see a [lung] disease that was already diagnosed, but another to see changes that no one predicted were there," says lead author Sean Fain, a UW-Madison assistant professor of medical physics. "This approach allows us to look at lung micro-structures that are on the scale of less than a millimeter."

Cigarettes can contribute to the onset of respiratory conditions such as emphysema, bronchitis and asthma. In emphysema in particular, the alveoli - tiny sacs in the lungs that transfer oxygen to blood - gradually break down. Fain and his team therefore reasoned that helium gas molecules are likely to have more space to move around in lungs with fewer functioning alveoli.

Testing that theory among eight non-smokers and 11 healthy smokers with no obvious lung damage, Fain found that the movement or "diffusion coefficient" of helium gas molecules did indeed correlate with how much a person smokes, with greater movement indicating a higher level of lung damage. But a more commonly used imaging technique, known as computed tomography, failed to register a similar correlation. "Our technique is potentially more sensitive than established

[imaging] techniques," says Fain. "This is the first time structural changes have been shown in the lungs of asymptomatic smokers."

Fain says helium-based MRI scans could one day help to gauge the efficacy of experimental drug therapies aiming to reduce smoking-related lung damage. The approach may also help to screen for people who might be genetically predisposed to conditions such as emphysema. In future work, Fain plans to dig deeper, to understand the underlying factors that lead to micro-structural breakdown in lungs. Other co-authors of the study were Michael Evans, an assistant researcher in the department of biostatistics and medical informatics; Thomas Grist and Frank Korosec, both UW-Madison professors of radiology; and Shilpa Panth, a biomedical engineering researcher.

.....Source: medicalnewstoday.com



### **ODOR INTOLERANCE TIED TO COUGH SENSITIVITY**

Patients who have aversions to certain odors also may have increased tendency to cough, shows a new study. Swedish researchers administered the Chemical Sensitivity Scale for Sensory Hyperreactivity (CSS-SHR) questionnaire to 103 patients to determine their self-reported odor sensitivity. Researchers then determined patients' cough sensitivity, the tendency for cough to be provoked, using the capsaicin inhalation test. Among the patients, 16 individuals had increased cough sensitivity and, of these patients, more than 80 percent had a positive CSS-SHR score. Only 5 percent of individuals with a negative CSS-SHR score had a positive capsaicin test. Researchers conclude that patients with odor intolerance and upper and lower airway symptoms, such as cough, may suffer from a physiological disorder. The study appears in the June issue of CHEST, the peer-reviewed journal of the American College of Chest Physicians.

.....Source: American College of Chest Physicians



### **CR— OUR RECOMMENDATIONS — A SUMMARY**

Inhaled steroids are effective and safe medicines used to treat people with asthma and chronic obstructive pulmonary (lung) disease, COPD. They reduce and can help prevent inflammation, swelling, and mucus buildup in airways and lungs. By doing so, they keep you breathing easier.

Not everyone with asthma or COPD needs an inhaled steroid. Sometimes, lifestyle adjustments (and especially quitting smoking) work well enough that you won't need one. On the other hand, far too many people who could benefit from an inhaled steroid are not using one. If your asthma symptoms are persistent and you have frequent asthma attacks, you should be using an inhaled steroid.

Taking effectiveness, safety, dosing convenience, and cost into account, we have chosen the following steroid inhalers as Consumer Reports Best Buy Drugs for treating adult and childhood asthma and adult COPD:

- Beclomethasone (QVAR) 80mcg-- for adults and children age 5 and over with asthma

- Budesonide (Pulmicort Turbuhaler) 200mcg-- for adults with asthma who may prefer a dry powder inhaler and for children with asthma age 6 and over
- Fluticasone (Flovent HFA) 110mcg-- for children with asthma age 12 and over
- Fluticasone (Flovent HFA) 220mcg--for children age 12 and over and adults with asthma, and for adults with moderate to severe COPD
- Mometasone (Asmanex Twisthaler) 220mcg--for adults with asthma

All of these medicines at the specified doses are as effective and safe as other inhaled steroids, and well priced compared to them. None of them currently are available as generics, so they can be pricey. For example, if you need a high dose—usually because your asthma or COPD is severe—the cost can be more than \$200 or even \$300 a month. In this case, talking with your doctor about the most affordable inhaled steroid becomes even more important.

.....Source: Consumer Reports



### **RISK OF VENTILATOR-ASSOCIATED PNEUMONIA CUT SIGNIFICANTLY**

Researchers found that administering the topical antiseptic chlorhexidine to critically ill patients on mechanical ventilation greatly decreased their daily risk of acquiring deadly hospital-related ventilator-associated pneumonia. The results appeared in the second issue for June 2006 of the American Journal of Respiratory and Critical Care Medicine, published by the American Thoracic Society.

Mirelle Koeman, M.D., Ph.D., of the Department of Emergency Medicine and Infectious Diseases at the University Medical Center Utrecht in the Netherlands, and 13 associates used chlorhexidine as an oral decontaminant paste to treat 127 intubated ventilated patients. The investigators treated a separate group of 128 ventilated patients with a paste composed of chlorhexidine and the antibiotic colistin. A third group of 130 ventilated patients were given a placebo paste. In comparison to the placebo, the chlorhexidine paste reduced the risk of ventilator-associated pneumonia by 65 percent and the chlorhexidine/colistin combination cut the risk by 55 percent. All 385 patients who were enrolled consecutively in the study needed mechanical ventilation for 48 hours or more at two university hospitals and three general hospitals in the Netherlands.

According to the authors, ventilator-associated pneumonia is second only to urinary infection as a hospital-acquired illness. The disease affects 27 percent of all critically-ill ventilated patients. Crude mortality rates from ventilator-associated pneumonia range from 20 to 60 percent, and resulting health care costs can be anywhere from \$12,000 to \$40,000 per patient. The bacteria that cause ventilator-associated pneumonia usually originate in the mouth and throat. Mechanically ventilated patients have a catheter called an endotracheal tube inserted through either their nose or mouth into the windpipe (trachea) to maintain an open airway, to deliver oxygen, and to suction mucus. The endotracheal tube raises the risk of

ventilator-associated pneumonia up to 20 times by allowing bacteria access to the lungs.

The trial medication in the form of a paste was applied every 6 hours inside the mouth at the cheeks (or the buccal cavity). Oropharyngeal swabs were taken daily to determine the level of gram-positive and gram-negative microorganisms. Of the 385 patients in the study cohort, 52 were diagnosed with ventilator-associated pneumonia: 23 in the placebo group (18 percent); 13 in the chlorhexidine group (10 percent); and 16 in the combination group (13 percent). "The interventions tested cost less than \$100 per patient, making them extremely cost effective," said Dr. Koeman. However, the researchers noted that the experimental treatments made no difference in how long patients required mechanical ventilation or how long they had to stay intensive care unit. They also reported no change in intensive care unit survival rates.

In an editorial on the research in the same issue of the journal, Donald E. Craven, M.D., of Lahey Clinic Medical Center in Burlington, Massachusetts, and Robert A. Duncan, M.D., M.P.H., of Tufts University School of Medicine in Boston, called the findings an "impressive result for an inexpensive, non-toxic modality" that "warrants further attention." At the same time, they argued that the study raised several important concerns. They wrote: "The use of 'sequential analysis' is an intriguing concept and offers the promise of more efficient study design, but the small number may have limited power and increased the possibility of an erroneous conclusion. For example, there appear to be significantly more males and patients with infections in the placebo group, which questions the effectiveness of randomization. Second, it is difficult to reconcile significant reductions in ventilator-associated pneumonia with an absence of effect on ventilator days, length stay and mortality."

They continued: "Why wasn't chlorhexidine ultimately more effective and why did some patients fail prophylaxis? Data is limited on how best to apply chlorhexidine paste and its pharmacokinetics, in vitro efficacy, impact on biofilm formation, or possible bacterial resistance, as reported for other topical agents. Furthermore, it is important to understand how the use of chlorhexidine and combined chlorhexidine and colistin will complement other recommended prevention strategies and health care improvement projects for ventilator-associated pneumonia." To demonstrate the need for clear instructions for use, the editorial authors compared the risk of death from medical error (1 in 300) to that from airline travel (1 in 10 million). They also noted the growing interest in applying the principles of industrial safety to the prevention of health-care associated infections.

Although the authors called the response to date "notably slow," they pointed out that the Institute for Healthcare Improvement, through its "100,000 Lives Campaign," has successfully enlisted 3,000 hospitals in establishing safety programs that include a "ventilator-associated pneumonia prevention bundle." Recommendations for using the bundle include elevating the head of the bed by 30 degrees to prevent inhaling unwanted substances (aspiration), vacations from

sedation to allow earlier tube removal, and prophylactic agents to reduce stress bleeding and deep vein thrombosis. The authors indicated that the prevention of ventilator-associated pneumonia is a multi-disciplinary team effort in which nurses, respiratory therapists, physicians and administrators "play a vital role." They concluded that, with the right cooperation, "zero tolerance" is an achievable goal for this deadly problem.

.....Source: American Thoracic Society



## SHORTER ANTIBIOTIC TREATMENT FOR COMMUNITY-ACQUIRED PNEUMONIA JUST AS GOOD

Antibiotic treatment for community-acquired infections is just as effective over a 3 day period as for the recommended 7-10 days. A report in the British Medical Journal says shorter treatment may also stem the growth of resistance rates. In fact, the report highlights the need for reviewing recommended durations for common infections in general. As there have not been enough studies showing the benefits of short course therapy, it is accepted practice to carry on with antibiotic therapy for several days after symptoms have improved.

A Dutch study compared treating patients with moderate-to-severe community acquired pneumonia with amoxicillin for three days and eight days after being admitted to hospital. There were 119 patients. Following a substantial improvement after three days on intravenous amoxicillin, 63 were given oral amoxicillin while 56 were given a placebo - all of them three times a day for a further five days. They were all assessed at days 7, 10, 14 and 28 (treatment ended at day 8). At day 10 both groups had a clinical success rate of 93%, at day 28 the oral amoxicillin group was at 90% and the placebo group at 88%. Length of hospital stay, x-ray results and resolution of symptoms were similar for both groups.

The study showed that the success rate was the same if amoxicillin treatment was stopped after three days as for eight days for adult patients with mild to moderate-severe community acquired pneumonia who responded well to the initial three days of treatment, says the report. The authors concluded that shorter treatment may also reduce general antibiotic consumption and resistance rates for respiratory infections.

.....Source: medicalnewstoday.com



## TARGET WOMEN'S DEPRESSION TO REDUCE DISABILITY FROM CHRONIC CONDITIONS, SUGGESTS STUDY

Women with higher levels of depression when suffering with long-term pain report greater disability than men in the same situation, according to new research published in the latest edition of the European Journal of Pain. This suggests that by targeting their depression, doctors could help reduce disability in female patients with chronic conditions such as arthritis and back pain.

The study, which involved 260 chronic pain patients from Royal National Hospital for Rheumatic Diseases (RNHRD), builds on growing evidence that "psychosocial" factors can have an effect on a person's health and behavior. "It is now accepted

that pain is more than just a sensory experience, and that factors like a person's gender, their emotional condition or their interactions with others, can contribute to their pain experiences," said Dr. Ed Keogh from the Pain Management Unit at the University of Bath and RNHRD.

"This research shows that pain-related emotions are associated with pain-related behaviors, such as the number of visits to the GP, the number of medications taken, the amount of sleep lost, and disability, but it also highlights a significant discrepancy between the behaviors of men and women. "For women in particular, targeting depression may help reduce disability associated with chronic pain." Women are already known to report higher levels of depression than men, and are generally found to report greater levels of pain, with greater frequency and greater intensity when compared to men. Evidence is emerging that suggests men and women also respond differently to the drugs and other treatments, such as psychology-based interventions, used to treat pain.

"We found that within men with chronic pain, higher levels of depression were related to a greater number of medications being used than women," said Dr. Keogh. "Why this should be is not clear, but the social gender roles we adopt throughout our lives may have some important part to play. Alongside drugs, other therapies that focus on the behaviors and tendencies associated with depression, such as avoidance and withdrawal, may also be effective in these situations for some people." .....

.....Source: University of Bath



## **US HEART DOCTORS GROUP OPPOSES MEDICARE PAY CHANGES**

Proposed changes in the way the U.S. Medicare health insurance agency reimburses hospitals would jeopardize doctors' ability to care for patients with life-threatening heart conditions, a doctors' group said on Tuesday.

The U.S. Centers for Medicare and Medicaid Services in April proposed rule changes aimed at redistributing funding for in-patient care from more profitable and complex procedures, such as heart device implants, to treatments that are more routine and are seen as underfunded, such as pneumonia. The payment changes proposed by CMS, which runs the Medicare health program for more than 43 million elderly and disabled people, would cut hospital staffing for critical cardiac procedures, the Heart Rhythm Society said.

The result of such cutbacks would be to reduce patients' access to life-saving therapy and technologies, such as implantable cardioverter defibrillators (ICDs), which shock racing hearts back to normal rhythm. CMS's proposed changes to the hospital in-patient payment system will significantly hinder our mission to improve care and advance treatments for heart rhythm disorders, such as sudden cardiac arrest and atrial fibrillation," Dr. Dwight Reynolds, president of the Heart Rhythm Society, said in a statement. The new CMS payment methodology would slash payments for ICDs as much as 24 percent, pacemakers by 15 percent and cardiac ablation surgery used to treat atrial fibrillation -- the most common abnormal heart rhythm—28 percent. The changes would affect

such companies as Medtronic Inc., St. Jude Medical and Boston Scientific Corp.

.....Source: heart.healthcentersonline.com

## **WOMEN WITH COPD FARE WORSE THAN MEN WITH SAME LEVEL OF DISEASE**

Women with chronic obstructive pulmonary disease (COPD) fare worse than men both in terms of the severity of their disease and their quality of life, according to a study to be presented at the American Thoracic Society International Conference on May 22nd. These differences may play a role in the increased death rate seen among female patients with COPD, said researcher Claudia Cote, M.D., Assistant Professor of Medicine at the University of South Florida in Tampa.

The researchers studied 85 women, and compared them with 95 men who had the same levels of COPD severity according to guidelines of the Global Initiative for Chronic Lung Disease (GOLD). They found that female patients were significantly younger than male patients with the same severity of disease. The women had lower lung function, more trouble breathing, and reported a worse quality of life. The women also received a worse score on the BODE index, which looks at lung function, nutritional status, symptoms and exercise capacity in order to measure a COPD patient's disease severity and predicted survival.

COPD is the fourth leading cause of death in America, claiming the lives of 120,000 Americans in 2002. Beginning in 2000, women have exceeded men in the number of deaths attributable to COPD. In 2002, over 61,000 females died compared with 59,000 males. Reasons that women with COPD do worse than their male counterparts, Dr. Cote said, may be related to underdiagnosis, misdiagnosis and less access to healthcare. While the study findings may appear discouraging for women with COPD, the way in which the patients were assessed can lead to improvements in treatment for all COPD patients, Dr. Cote said.

"Until recently, doctors have used only lung function as a measurement for COPD severity," Dr. Cote said. "But we've come a long way in understanding this disease, and we now know that while COPD affects the respiratory system, it also has tremendous consequences on the peripheral muscles, cardiovascular system, and overall nutritional status—it's a multi-systemic disease. If we only measure respiratory function we will be overlooking other organ impairment and then will miss an opportunity for intervention."

Understanding that COPD can affect many aspects of a patient's health gives doctors more tools to treat patients, Dr. Cote said. "Traditionally, doctors have just looked at airflow obstruction, which doesn't respond well to drug treatment and has the tendency to deteriorate as a person ages, so the disease has seemed poorly treatable and minimally reversible. But by doing a comprehensive assessment, looking at a patient's nutritional status, exercise capacity and symptoms, it becomes more possible to treat COPD because such impairment is amenable to intervention."

For example, she said, there are now two long-acting bronchodilators that have been shown to improve not only lung

function but also exercise capacity, symptoms, health status and lung hyperinflation in COPD patients. Non-drug interventions such as pulmonary rehabilitation can also improve some of these outcomes and improve survival, while surgery such as lung volume reduction and lung transplantation greatly help selected patients while prolonging their lives. "We should see COPD as a treatable disease and be aggressive in the management of our patients. Maybe then we'll be able to impact survival," she said. "COPD no longer has to be seen as a chronic, relentless, and fatal disease—we can help patients live longer with better quality of life."

This message is important for women in particular, Dr. Cote said. "Women's life expectancy is on average seven years longer than men's, so women who are living with a chronic illness like COPD will bear a heavier burden of disease compared with men." There is a growing awareness that COPD is treatable, and that there are tools to assess how patients are doing on many levels, Dr. Cote said. "Physicians will start treating COPD more aggressively, because they know they can provide important improvements in outcomes for their patients." .....Source: American Thoracic Society



## ENLARGED HEART NOT ALWAYS A SIGN OF TROUBLE

An enlarged heart is usually considered a sign of cardiac trouble. But the cause of the enlargement is critical in determining whether there's actual heart disease, researchers are reporting. In fact, the nature of the stress that created the enlargement is more important than the duration of the stress, according to the researchers. "We set out to answer a longstanding question in cardiac biology, which is what happens to the heart during periods of stress," said lead researcher Dr. Howard Rockman, a cardiologist at Duke University Medical Center.

The researchers looked at different types of stress, such as stress from exercise, as well as so-called pathological stress that causes damage to the heart. High blood pressure is an example of pathological stress, Rockman said. Although both types of stress can be severe, the way the heart responds to exercise or high blood pressure is very different, Rockman said. "Exercise is beneficial. The heart adapts in a good way," he said. Endurance runners have large hearts, Rockman noted, but without damage to the function of the heart. "In contrast, someone with longstanding high blood pressure can develop a dilated heart and heart failure," he said.

To test the reactions of the heart to these different types of stress, Rockman's team did a series of experiments in mice. The findings appear in the June 1 issue of the *Journal of Clinical Investigation*. The experiments demonstrated that intermittent cardiac stress from high blood pressure starts a series of events that eventually leads to abnormalities in heart muscle cells as well as damage to blood vessels. The researchers also found that these harmful responses can begin before the heart itself begins to get bigger.

To induce high blood pressure in the mice, Rockman's group tied a slipknot around each mouse's aorta. Then they

manipulated the knot from outside the mouse through a small incision in the back. The researchers tied off the aortas in one group of mice for 90 minutes twice a day. A second group of mice exercised for 90 minutes twice a day, either by swimming or running in a wheel. "After seven days, the hearts of the swimming mice were gorgeous," Rockman said. The hearts of the mice with high blood pressure were similarly enlarged and appeared to be functioning normally, but individual heart muscle cells showed significant structural and cellular abnormalities, the researchers found.

"The heart is more sophisticated than we thought," Rockman said. "The type of stress you apply on the heart determines whether it's going to develop a deleterious phenotype or whether it's going to be an adaptive and beneficial phenotype," he added. Rockman speculated that the same findings would hold for humans. Exercise is beneficial for the heart, he said, adding that "it increases the number of blood vessels in the heart, and the cells activated in the heart are all on the good side. "The opposite things that you do, the things that raise blood pressure, even intermittently, may not be good," he added.

Dr. Gregg C. Fonarow, a professor of cardiology at the University of California, Los Angeles, said, "This study provides important new insights into the mechanisms behind cardiac hypertrophy (enlarged heart)."

The study addresses a common theory on why cardiac stress induced by exercise does not produce changes in the heart similar to the cardiac stress from high blood pressure, Fonarow noted. "The theory was that stress from exercise was intermittent, whereas that from high blood pressure was more continuous," he said. "Better understanding of these mechanisms may lead to new treatments that can better protect the heart from hypertrophy and heart failure," Fonarow said.

.....Source: HealthDay News



## EXERCISE REDUCES LEG PAIN OF PVD

***Arm exercises can help relieve leg pain caused by peripheral vascular disease (PVD), scientists report.***

PVD involves damage to the blood vessels that serve the limbs, usually due to obstruction by plaque. The reduced blood flow can cause claudication (severe, chronic leg pain that can hinder walking). PVD and claudication are common in people with diabetes and high blood pressure. British researchers studied 104 PVD patients between ages 50 and 85. Participants performed exercises using stationary arm cycles twice a week for 24 weeks. At the conclusion of the project, the researchers found that the volunteers could walk 50 percent longer before the start of leg pain. The average maximum walking distance increased by 29 percent, an additional 109 yards.

"Our results suggest that a combination of physiological changes and an increase in exercise pain tolerance account for the observed improvement in walking ability," researcher John Saxton said. "The advantage of exercising the arms for patients with PVD is that they don't generally encounter pain during this type of physical activity. This can help to increase their motivation and enthusiasm for exercise."

The researchers described the project as the first large-scale study to show that upper-body exercise can help treat PVD. The study was published in the Journal of Vascular Surgery.

.....Source: Healthcentersonline

## **FITNESS POOR AMONG PATIENTS ENTERING CARDIAC REHAB**

Patients who start a rehabilitation program after having a heart attack or undergoing heart surgery tend to be in extremely poor shape, from a fitness standpoint, new study results show. The finding is especially notable in women, who had an average aerobic fitness level similar to that of chronic heart failure patients. Besides providing an idea of probable outcomes, knowing patients' maximal exercise aerobic capacity can be used to set safe, effective and individualized exercise levels, Dr. Philip A. Ades of the University of Vermont College of Medicine in Burlington and his associates note.

However, normal levels for cardiac patients have yet to be established, the team reports in the American Heart Association's journal *Circulation*. They set out to establish normal values of peak oxygen uptake, known as VO<sub>2</sub>, for patients entering cardiac rehabilitation. Included were patients who had undergone coronary artery bypass grafting, angioplasty, or heart valve replacement or repair, in addition to patients with unstable angina or a heart attack. Men had higher peak VO<sub>2</sub> than women. In fact, the authors write, the levels for women approached "values seen when patients are considered for cardiac transplantation in the setting of chronic heart failure." The authors remeasured peak VO<sub>2</sub> in 504 patients after 36 sessions of aerobic training and found that it had increased on average by 18 percent in men and 12 percent in women.

Using these findings, doctors "can now assess the fitness status of an individual patient in relation to age-, gender-, and diagnoses-matched peers," the researchers conclude. This can assist "in setting realistic clinical goals, in encouraging participation in cardiac rehabilitation training programs, and in benchmarking fitness levels of patients in a given cardiac rehabilitation program compared with established norms."

SOURCE: *Circulation*, June 6, 2006.



## **IN THE BLINK OF AN EYE**

You've been staring at your computer screen for hours. Now your eyes are as dry as sandpaper. Coincidence? Not remotely. The muscles you use to squint are the same ones used to blink. And most of us frequently squint at computer screens, consciously or not. When you're squinting, you're not blinking normally, so your eyes aren't getting the lubrication they need. This won't cause any long-lasting damage, but it's uncomfortable.

Even slightly squinting at a computer can cause problems. According to a recent study, just a tiny narrowing of the eye cut the number of blinks in half, from 15 down to 7.5 times a minute. Full squints (eyes halfway closed) cut blinking to only

4 times a minute. When blinks are that few and far between, it's no wonder eyes wind up irritated and achy.

You may be able to solve the problem with a few easy steps. First, reduce the glare on your computer screen -- change the lighting, reposition your computer to avoid window reflections, or use an antiglare screen filter. Next, adjust the brightness and contrast levels on your computer monitor to sharpen readability. Finally, take a break -- it's good for your spine and wrists as well as your eyes.

.....Source: RealAge



## **NATIONAL JEWISH LUNG LINE**

### **What is LUNG LINE?.....**

LUNG LINE is a free information service for healthcare consumers provided by National Jewish. LUNG LINE is staffed by registered nurses who have years of clinical experience at National Jewish. LUNG LINE is available by calling 1-800-222-LUNG (5864) 8:00 am to 4:30 pm Mountain time (10:00 am to 6:30 pm Eastern time) Monday through Friday or e-mail the LUNG LINE.

### **What does LUNG LINE do?.....**

LUNG LINE nurses provide educational information on lung, allergic and immune diseases to healthcare consumers who call, e-mail or contact National Jewish through our web site or other web sites.

Nurses are available to answer your questions about early detection, care and prevention of respiratory, allergic and immune diseases. Although they can't diagnose conditions or suggest specific medical care, they can review topics to discuss with your healthcare provider and provide state-of-the-art information. In addition to answering your questions, they can send you free educational materials and refer you to a specialist, if indicated. LUNG LINE nurses can also answer your questions about National Jewish and send information about our patient care programs. 1-800-222-LUNG (5864) or email the LungLine using the form at <http://www.njc.org/contact/lung/email.aspx>

Source: Frank Barrett, EFFORTS Anchor



## **WATER AND PEOPLE WITH DIABETES - THREE REASONS TO STAY HYDRATED**

Type-2 diabetes the body's inability to regulate sugars, largely caused by lifestyle factors such as obesity, inactivity and smoking is nearing epidemic proportions in the U.S. The Harvard School of Public Health estimates that more than 21 million Americans are currently living with the chronic disease (though up to a third of them don't know it), while another 41 million have pre-diabetes. What's more, while Type- 2 Diabetes is often called adult-onset diabetes, about 46% of the overall cases of diabetes currently diagnosed in children are of the Type-2 classification.

Of the many health concerns those with Type-2 Diabetes grapple with each day, none is more important than the increased need to remain hydrated. Judy Hochstadt, MD, a Connecticut-based pediatric endocrinologist and diabetologist, explains, Water is a critical necessity for all of us each day, but for those with Type-2 Diabetes, even the slightest decrease in

hydration levels can cause serious health problems. Nina Riley, founder and CEO of Water Sensations, Inc., adds, Staying hydrated can be particularly challenging for diabetic children, who by their nature may be less compliant with health regimens than adults. The key for kids and for many adults is to make these important directives more fun and enjoyable.

The Diabetes-Hydration Connection According to Dr. Hochstadt, the body has an intricate process by which it converts the foods we eat into sugar molecules called glucose and delivers it to the bloodstream. Normally, as energy requirements increase, such as during exercise or other times of physical exertion, the cells receive a message to open up to take in the glucose and use it for fuel. At the same time the pancreas releases insulin into the bloodstream to facilitate sugar utilization by the body's cells and tissues. In normal individuals, sugar balance is tightly controlled, ensuring that levels don't spike too high or sink too low. However, in Type-2 diabetes, the body either fails to make enough insulin, or it is resistant to the insulin it does make.

Even with prediabetes, sugar levels become erratic and the body goes into overdrive to flush out the glucose, Dr. Hochstadt explains. It does so by pulling water from cells in order to excrete sugar through urine. For every one glucose molecule excreted, two water molecules must follow; mathematically speaking, its fairly easy to see how diabetics are at much greater risk of dehydration, she adds.

### Three Key Reasons to Drink Up

Dr. Hochstadt points out the three top reasons why diabetics even more so than healthy children and adults must track their water intake and remain well-hydrated every day:

1. Simple Dehydration occurs countless times during the day to many of us, when we get too busy or forget our water bottle, or when were simply not in the mood for a glass of plain H<sub>2</sub>O. However, in diabetics, skipping a hydrating water break can lead to hyperglycemia too much sugar in the bloodstream without water to help flush it out followed by dehydration, as the body robs water from the cells to compensate. Ms. Riley, whose company Water Sensations Inc. makes calorie-free, sugar-free, clear liquid flavor enhancements for drinking water notes, When water is unappealing, for adults or kids, its easy to forget it or delay it. Making it more delicious, whether its with a slice of lemon or a sugar- free flavor enhancement, can be instrumental in getting everyone to drink more water.
2. Exercise-Related Dehydration can occur more quickly in diabetics than in healthy people, and can have more serious consequences. Because diabetics require extra water to flush high blood sugar from the body, and since the body requires more water in general during sustained periods of physical activity, these two requirements can deplete water levels much faster in diabetics, Dr. Hochstadt notes. Ms. Riley adds, Its even more important for diabetics to drink plenty of water before, during and after exercise.

- Hyperosmolar Hyperglycemic Nonketotic Syndrome is a complicated way of describing the consequences of severe dehydration in patients with Type-2 Diabetes. While the condition is relatively rare, Dr. Hochstadt warns that it is also life threatening. In HHNS, the patient may develop severe chemical and acid-based imbalances that may precipitate seizures, kidney failure, coma, and possibly death. The best way to avoid HHNS is to preempt it by staying hydrated; to prevent its most serious complications, patients must catch it in the early stages by monitoring blood sugar levels regularly. Any unexplained reading over 500mg/dl is a warning sign, and should prompt immediate attention with a call to the doctor.

Our bodies are made up of more than 90% water, and while it's a crucial element for everyone's good health, it can be a lifesaver for those with Type-2 Diabetes, Ms. Riley concludes. Making water more delicious, interesting, flavorful and fun with sugar- free enhancers like Water Sensations can make it easier for kids and adults alike to get the water they need each day to stay healthy.

.....Source: Health News Digest



### AMA PROPOSES BAN ON ADVERTISING FOR NEW DRUGS WHILE DOCTORS LEARN ABOUT MEDICATION

AMA on Wednesday said that the federal government should require pharmaceutical companies to delay direct-to-consumer advertisements for new medications and medical devices until physicians have time to study their safety and effectiveness, the Chicago Tribune reports. According to AMA, the time that pharmaceutical companies have to wait before they could begin DTC ads for new medications should depend on the availability other treatments for the same conditions and the severity of the conditions involved. AMA also said that pharmaceutical companies should have to obtain FDA approval before they begin DTC ads. In addition, AMA said that DTC ads that feature actors who portray physicians are "misleading" and should require "a disclaimer" that is "prominently displayed." AMA said that DTC ads often overstate the effectiveness of new medications and downplay the risks and side effects. Pharmaceutical companies spent more than \$4 billion on DTC ads in 2004, the Chicago Sun-Times reports.

Reaction  
AMA President-elect Ronald Davis, a preventative medicine specialist from Michigan, said, "A temporary moratorium on direct-to-consumer advertising of prescribed drugs and medical devices will benefit both the patient and physician." He added, "It's possible that companies could do it voluntarily with some coordination or oversight of their trade association, but failing that, the government could step in to put that policy in effect." Sidney Wolfe, director of the Health Research Group at Public Citizen, said, "A huge proportion of ads contain false and misleading information." However, the Pharmaceutical Research and Manufacturers of America said that under current guidelines pharmaceutical companies "spend an appropriate time" on the

education of physicians before they begin DTC ads. PhRMA also said that required FDA approval before pharmaceutical companies begin DTC ads "might have the unintended consequence of unnecessarily delaying when patients hear of a new treatment." FDA spokesperson Susan Bro said that the agency believes a required delay on DTC ads for new medications likely would not "survive a constitutional challenge."

.....Source: medicalnewstoday.com



## **PIZZA WARNING LABELS? THAT'S WHAT AMA WANTS**

### ***The doctors group is pushing for new warning labels on high salt foods***

The nation's largest doctors group is pushing for new warning labels. Only these labels aren't for drugs — they're for food. The American Medical Association voted to urge the government to require high-salt foods to be labeled and also vowed to push the food industry to drastically cut the amount of salt in restaurant and processed foods. The goal would be 50 percent less salt within a decade.

Americans eat almost twice the amount of salt they should, and that contributes to high blood pressure and heart problems, the AMA says. Labels with pictures of salt shakers bearing the word "high" and red exclamation marks might help consumers think twice about eating high-sodium foods, suggested an AMA council report that led to the new policy.

Foods considered high in salt are those with more than 480 milligrams of sodium per serving, according to the AMA report. That includes hot dogs, some canned soups, a slice of packaged pepperoni pizza, an order of chicken chow mein and a cheeseburger, according to a food chart accompanying the council report.

On a voice vote, AMA delegates adopted the policy at their five-day annual meeting. The measure also calls for the AMA to ask the Food and Drug Administration to revoke salt's status as a food that is "generally recognized as safe," known as "GRAS" in the industry. GRAS food includes such staples as sugar and pepper.

### **Twice the recommended amount**

The American Heart Association recommends limiting sodium intake to less than 2,300 milligrams daily, or less than about one teaspoon, but the average daily consumption among American adults is nearly double that amount, the report said. The AMA report said there is overwhelming evidence that eating an excessive amount of salt is a risk factor for high blood pressure and may be an independent risk factor for other cardiovascular problems. More than 30 percent of U.S. adults have high blood pressure, and cardiovascular disease is the nation's leading cause of death. "Ultimately, substantial cooperation among the government, the food industry, physicians and the nutrition community will be required to accomplish meaningful change," the report said.

### **Conflicting opinion**

The Food Products Association, a trade group for the food and beverage manufacturing industry, said the new policy is

misguided. "Why single out salt?" asked Robert Earl, the group's nutrition policy director. "A direct link between salt and negative cardiovascular outcomes is not as clear as some portray it to be." He said existing food labels listing sodium content are sufficient for consumers to make healthy choices. Salt occurs naturally in some foods and is added to others to enhance taste and preserve freshness.

The AMA has considerable clout in Washington and an FDA spokesman said the group's stance on salt could lead the agency to consider holding hearings on the issue. The Center for Science in the Public Interest, a consumer group, last year asked the FDA to revoke salt's status as a safe food. The group's executive director, Michael Jacobson, said the AMA action "adds very productively to the debate."

Makers of processed foods, restaurants and fast-food chains are all targets of the AMA's new policy. One of those, McDonald's Corp., did not immediately respond to a request for comment on the policy.

In other policies adopted, the AMA:

- Vowed to push to end alcohol ads during college sports broadcasts as part of its campaign against underage drinking.
- Pledged to encourage federal action to ban people younger than age 18 from using tanning parlors, to help reduce teens' risks for skin cancer as they age.
- Rejected a measure asking it to lobby for a tax on sugar-sweetened sodas.

.....Source: MSNBC.com



## **NEW JERSEY ASSEMBLY APPROVES BILL TO CREATE DATABASE OF RETAIL PRESCRIPTION DRUG PRICES**

The New Jersey Assembly voted 72-3 to approve a bill (A 2537) that would create a Web site and toll-free phone number that would provide residents with retail prices of 150 popular prescription drugs, the Newark Star-Ledger reports. The bill, sponsored by state Rep. Linda Greenstein (D), is designed to allow state residents to compare drug prices at various pharmacies. A similar bill was approved last month by the state Senate Health, Human Services and Senior Citizens Committee and is awaiting further committee action. The legislation originally included a provision that would have required pharmacies to compile the price lists themselves and post the information in their stores, a measure that was opposed by the New Jersey Council of Chain Drug Stores. Under the amended version, the state Board of Pharmacy would maintain the database using price information from the state Medicaid office, which already receives the data from pharmacies. The database would be updated weekly. AARP, Citizen Action and the Public Interest Research Group support the bill, which was written in response to studies that show prices for certain prescription drugs varied by an average of \$47 at different pharmacies in one New Jersey county. Greenstein said, "With the ability to comparison shop for prescription drugs from the comfort of their homes, New Jersey's seniors will know that they are getting the best deals possible."

.....Source: medicalnewstoday.com





**“My doctor told me to start my exercise program very gradually. Today I drove past a store that sells sweat pants.”**

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