

EFFORTS



Emphysema Foundation For Our Right To Survive

Emphysema Takes Your Breath Away

March 2008

STUDY SUGGESTS NEW THERAPY FOR LUNG DISEASE PATIENTS

A new study by researchers at Northwestern University's Feinberg School of Medicine may change current thinking about how best to treat patients in respiratory distress in hospital intensive care units.

It has been commonly believed that high levels of carbon dioxide (CO₂) or hypercapnia in the blood and lungs of patients with acute lung disease may be beneficial to them. Now, for the first time, scientists have shown how elevated levels of CO₂ actually have the opposite effect.

The excessive CO₂ impairs the functioning of the lungs. Jacob Sznajder, M.D., chief of pulmonary and critical care at the Feinberg School, and his research team found that high levels of CO₂ make it harder for the lungs to clear fluid.

The excess CO₂ initiates a signaling cascade leading to the inhibition of the action of sodium "pumps" that help move water out of the air spaces. This creates a greater risk of edema in which the lungs flood with fluid.

The investigators worked with rats and human cells for the study, which was published in the February issue of the *Journal of Clinical Investigation*.

"Allowing high levels of CO₂ may contribute to the high mortality of patients with diseases like chronic obstructive pulmonary disease (COPD)," said Sznajder, a professor of medicine and of cell and molecular biology at the Feinberg School and a physician at Northwestern Memorial Hospital. "This study argues toward therapies to reduce the high CO₂ levels of patients toward normal levels, which is not the current practice in the intensive care unit."

COPD is the fourth leading cause of death in the United States, killing more than 120,000 people, according to the National Institutes of Health. When people have COPD, their lungs lose elasticity and have trouble exchanging carbon dioxide for oxygen. COPD used to be strictly a disease of smokers, but now it's also crippling the lungs of non-smokers.

Source: Northwestern University



HEALTHY EATING FOR PEOPLE WITH LUNG DISEASE

A healthy, varied diet is the key to good nutrition! All foods are comprised of carbohydrates, fat, protein, vitamins and minerals.

- Proteins come from meats, chicken, fish, dairy products, whole wheat products and beans.
- Carbohydrates are found in foods like fruits, grains, cereals, breads, pasta and rice.
- Fats are the most concentrated source of calories. This includes both animal and vegetable fats.
- Vitamins and minerals are found widespread in foods. Daily recommended intake is easily met by a healthy diet with adequate calories. If you are having a problem not getting enough calories in, a multivitamin/mineral supplement may be a good choice for you to supplement your diet with.

What are some special nutrients we should pay attention to?

- **Sodium** You should watch your intake of high sodium foods if you are taking steroids, have high blood pressure or heart problems. Try for a goal of no more than 4000 mg a day.
- **Foods High in Sodium** Table salt is the most common source of sodium in our diet. Salt is a combination of sodium and chloride. One teaspoon of salt has 2000 milligrams of sodium. Processed foods have large amounts of sodium. These include frozen dinners, luncheon meats and many canned items. Soups, vegetables, pork and beans, and tomato products are a few examples. Many people do not know that processed foods like ready-to-eat cereals, breads and baked goods also can be high in sodium. Sodium occurs naturally in foods. Unsalted, unprocessed foods such as fresh fruits, vegetables, meats and rice often have low sodium content. Most foods in your diet should come from this group.
- **Calcium** If you are taking steroids you should try to have 4 servings of calcium rich foods a day in order to prevent osteoporosis.
 - **Good Sources of Calcium** Milk, Yogurt, Frozen yogurt, Cottage cheese, Colby, cheddar and jack cheeses, American cheese, Swiss cheese, Non-fat dry milk powder, Clams, Sardines, canned with bones, Shrimp, Oranges, Calcium fortified orange juice
- **Potassium** Some diuretics, such as Lasix, pull potassium from the body. If your doctor tells you your potassium level is too low, eat high potassium foods.

- **Good Sources of Potassium**

Milk, Yogurt, Winter squash, Tomato juice, Stewed tomatoes, Apricots, Cantaloupe, honeydew, Banana, Grapefruit, Oranges, Dried prunes, Baked potato, Raisins, Spinach, 420

- **Fiber** Fiber is found mostly in whole wheat, oat and bran products, fruits and vegetables and beans. Fiber aids in the elimination process and should be incorporated into your daily meal pattern. The only problem with some high fiber foods is the excess gas they may produce. This can lead to a bloated feeling and shortness of breath. Identify the foods which cause you the most trouble and try to avoid them. Increase your fiber intake slowly to allow your body to adjust.

- **Common Gas-Producing Foods**

Apples (Raw), Asparagus, Beans (Pinto, Kidney, Black, Navy), Broccoli, Brussels Sprouts, Cabbage, Carbonated Drinks, Cauliflower, Corn, Cucumbers, Melons, Onions (Raw), Peas (Split, Blackeye), Peppers, Pimientos, Radishes, Rutabagas, Turnips

What are some common problems with lung disease?

- How much you eat at a time can also affect breathing.

Eating a large meal can leave you feeling too full and short of breath. Eating 3 smaller meals and 3 snacks each day will make the stomach less full. This leaves more room for your lungs to expand when you breathe. Another way to avoid that too full feeling is to eat less of the foods that cause gas. If the foods on the gas-producing list bother you, eat less of them.

Weight Loss. People with COPD (Chronic Obstructive Pulmonary Disease) can burn 10 times the amount of calories during breathing than someone without COPD! Weight loss is a very common problem that can be stopped with the right information. For people losing weight, an extra 250-500 calories a day is needed above your normal intake.

- **Tips to increase weight:**

Eat 3 small meals and 3 small snacks during the day. Concentrate on eating calorie dense foods. Avoid drinking lots of fluids with your meals. Take a nutritional supplement such as Ensure or Boost.

Weight Gain or Excess Weight. Weight gain can be due to many factors. Lack of physical activity, poor diet and medication can all contribute to increased body weight.

- **Tips for weight loss:**

Follow the guidelines set by the Food Guide Pyramid. Consume a diet low in saturated fat and sugar. Exercise as tolerated and advised to burn off calories. Eat three small meals and three snacks a day. Try different ways of doing things until they work for you! Eat a healthy, varied diet and enjoy yourself! Talk to your doctor or others on your health care team if you have questions.

You may request more written information from the Library for Health Information at (614) 293-3707 or email:

IRREGULAR EXERCISE PATTERN MAY ADD POUNDS

A new study should prompt people to think twice before taking a break from their exercise regimens, despite the pressures of family and work obligations, or waning motivation. Weight gained during an exercise hiatus can be tough to shed when exercise is resumed at a later date.

The consequences of quitting exercise may be greater than previously thought, according to a new study from the U.S. Department of Energy's Lawrence Berkeley National Laboratory that determined that the weight gained during an exercise hiatus can be tough to shed when exercise is resumed at a later date.

The study, conducted by Paul Williams of Berkeley Lab's Life Sciences Division, found that the key to staying trim is to remain active year-round, year-after-year, and to avoid seasonal and irregular exercise patterns. Most of all, don't quit. Failure to do so may be a contributing factor in the nation's obesity epidemic.

"The price to pay for quitting exercise is higher than expected, and this price may be an important factor in the obesity epidemic affecting Americans," says Williams, whose study is published in the journal *Medicine & Science in Sports and Exercise*.

The study should prompt people to think twice before taking a break from their exercise regimens, despite the pressures of family and work obligations, or waning motivation.

Using data collected from the National Runners' Health Study, Williams found that the impacts of increasing and decreasing vigorous exercise aren't the same among all runners. At distances above 20 miles per week in men and 10 miles per week in women, the pounds gained by running less were about the same as the pounds lost by running more. At these exercise levels, the effects of training and quitting training are comparable, and the weight gains and losses associated with changes in exercise levels are probably reversible.

However, Williams found that people who didn't run as many miles per week face an uphill battle if they want to lose the pounds accumulated during an exercise hiatus. At these less intense levels, an interruption in exercise produces weight gain that is not lost by simply resuming the same exercise regimen.

"At lower mileages, there is asymmetric weight gain and loss from increasing and decreasing exercise, leading to an expected weight gain from an exercise hiatus," says Williams. "In other words, if you stop exercising, you don't get to resume where you left off if you want to lose weight."

Specifically, Williams compared 17,280 men and 5,970 women who decreased their running distance with 4,632 men and 1,953 women who increased their running distance over a 7.7-year period. He found that runners who decreased their distance from five to zero miles per week gained four times as much weight as those who decreased their distance from 25 to 20 miles per week. He also found that people who started running after an exercise layoff didn't lose weight until their mileage exceeded 20 miles per week in men, and 10 miles per week in women.

Williams says his findings suggest that an effective public

health policy for preventing weight gain may need to include a strategy to keep physically active people active. His study also underscores the importance of avoiding start-stop exercise patterns. Exercise designed to prevent obesity may fall short of its benefits if the exercise is irregular, seasonal, or often interrupted.

"We are getting fat because we don't exercise sufficiently and consistently. The real solution to the obesity epidemic is getting people to exercise before they think they need it, and to stick with it," says Williams. "The ounce of prevention is indeed worth a pound of cure."

A study by Williams published in the same journal in August, 2007, revealed that middle-age weight gain is reduced by one-half in runners who ran 30 or more miles per week, compared to runners who ran less than 15 miles per week. These results, in conjunction with this more recent study, suggest a new way of tackling the obesity problem.

"Many scientists attribute the obesity epidemic to excess calories rather than exercise, because dieting has been shown to produce more weight loss than exercise," says Williams. "My findings suggest that calorie intake and body weight may be self regulating in active individuals."

The study, "Asymmetric Weight Gain and Loss From Increasing and Decreasing Exercise" is published in the February 2008 issue of the journal *Medicine & Science in Sports and Exercise*. It was supported in part by grants from the National Heart Lung and Blood Institute.

Source: Science Daily



PATIENTS GIVEN HOPE OF LUNG REPAIR DRUG

A NEW drug which could repair lung damage in patients with emphysema is to be tried out at Coventry's University Hospital. Coventry is one of 70 worldwide research centers - and the only UK hospital - taking part in pioneering new research into the causes and treatment of chronic obstructive pulmonary disease (COPD).

Patients with COPD, which includes chronic bronchitis and emphysema, are being invited to take part in the two-year research study. Dr David Parr, a consultant respiratory physician at University Hospital, said: "We are performing a trial of a potential new drug which could repair lung damage in patients with emphysema. Research is needed to provide evidence that patients who take a daily tablet of the drug, which is related to Vitamin A, experience health benefits as a result of repair to areas of damaged lung."

Patients needed for the study must have emphysema and must not have smoked for at least 12 months. A second research study will look at finding the genes responsible for the development of COPD.

Dr Parr said: "We hope that by identifying the genes we will be able to discover why chronic obstructive pulmonary lung disease occurs, so that in the future we can find better treatments."

Both of these studies have been made possible because of technical advances in the scanners used to take pictures of the lungs. Images can be transferred onto computers, allowing more accurate assessments of lung disease. Dr Parr added:

"We are looking for people from across the country, as well as those living in the Midlands, to take part in these two important research studies."

Patients who are interested in taking part in one of the trials should write to Dr Parr at University Hospital, Clifford Bridge Road, Coventry CV2 2DX.

RETIRED mental health nurse and aircraft firefighter Malcolm Benny is the first patient to volunteer to take part in the new drug trial. Mr Benny, aged 66, of Stoke Hill, Coventry, had to retire when he was diagnosed with COPD five years ago. He said: "I get breathless very easily. Climbing slopes or hills is very difficult and walking any distance is hard."

"My father died as a result of emphysema, so to a degree, it must be hereditary. When I was a child I nearly died from pneumonia so that must have caused some lung damage."

"Working as an aircraft firefighter also probably contributed. I had my first cigarette when I was nine and smoked for 50 years on and off. Our generation was encouraged to smoke - there were ashtrays in the cinemas and on the buses. "Knowing the effects of the condition, I am happy to take part in the research if it develops better treatment."

Mr Benny lives with his wife Jill and has two daughters, Julie and Sarah. He already helps out at University Hospital as an "expert patient", supporting other patients.



REDUCES AIRWAY MUCUS IN PRECLINICAL ASTHMA MODEL

Inverseon, Inc. announces the publication of a rapid communication of groundbreaking research led by Professor Richard Bond of the University of Houston, Inverseon's Scientific Founder. In the March article by Nguyen, et. al., in the *American Journal of Respiratory Cell and Molecular Biology* 2008; 38: 256-262, entitled, "Chronic Exposure to Beta-Blockers Attenuates Inflammation and Mucin Content in a Murine Asthma Model," airway mucus hypersecretion and inflammation were almost completely reversed upon treatment with certain beta blockers. The Journal commented that, "This research may result in a paradigm shift in the treatment of asthma. This research demonstrates the importance that duration of therapy has on clinical and physiologic responses."

"It is gratifying to see these findings, which were originally described in Prof. Bond's laboratory, confirmed in a respected independent laboratory," commented William J. Garner, MD, Chairman of Inverseon.

Source: PharmaLive



OPTICAL 'FREQUENCY COMB' CAN DETECT THE BREATH OF DISEASE

Exhale on a cold winter day and you will see the water vapor coming out of your mouth. Light up your breath with a Nobel-Prize-related tool, and you could potentially detect trace amounts of over 1,000 compounds, some of which provide early warning signs of disease. In a new paper,* a team led by Jun Ye, a physicist at JILA, a joint institute of the National Institute of Standards and Technology (NIST) and the University of Colorado at Boulder, has demonstrated an optical technique for simultaneously identifying tiny amounts of a broad range of

molecules in the breath, potentially enabling a fast, low-cost screening tool for disease.

“It is exciting to imagine the potential of analyzing all major biomarkers in one’s breath at once,” says Ye. “For example, nitric oxide can indicate asthma, but it also appears in breath with many other lung diseases, including chronic obstructive pulmonary disease, cystic fibrosis and bronchiectasis. However, if we simultaneously monitor nitric oxide, carbon monoxide, hydro-peroxide, nitrites, nitrates, pentane, and ethane, all important biomarkers for asthma, we can be much more certain for a definitive diagnosis of this important disease.”

Existing methods for detecting trace amounts of molecules from the breath are either bulky, slow, limited to specific molecules, unable to distinguish very well between multiple compounds or inaccurate at measuring their concentrations. In this new approach, the researchers analyze human breath with “frequency combs,” an optical tool cited in the 2005 Nobel Prize in Physics shared by JILA fellow Jan Hall. Frequency combs are generated by a laser specially designed to produce a series of very short, equally spaced pulses of light. Each pulse may be only a few millionth billionths of a second long. The laser generates light as a series of very narrow frequency peaks equally spaced, like the teeth of a comb, across a broad spectrum.

In the experiment, student volunteers exhaled breath that entered an optical cavity where it was “combed” by the light pulses. By detecting which colors of light were absorbed and in what amounts—essentially looking for light absorbed near the “teeth” of the comb—the researchers could detect specific molecules and their concentrations. For example, a student smoker who participated in the experiment had a level of carbon monoxide that was five times greater than a nonsmoker in the experiment. The optical comb approach allows the researchers to simultaneously analyze a very broad spectrum, covering many possible molecular compounds, with high precision, frequency resolution and sensitivity. The technique is in early phases, and would require clinical trials before it could become available at a doctor’s office, but it could lead to one of the first widespread applications of frequency combs.

Source: NIST



TAX TIPS

To compute the cost, do the following:

- Look at the label on your concentrator. It states the number of volts and amps the concentrator uses. If not found on the concentrator, look for it in the manual. As an example, we will use 115 volts at 4 amps. To convert to watts, multiply volts and amps as in $115 \text{ volts} \times 4 \text{ amps} = 460 \text{ watts}$ or W.
- Next, calculate the number of kilowatt – KW – hours per year. Multiply the watts your concentrator uses by .001KW/W to convert watts to kilowatts as $460 \text{ W} \times .001 \text{ KW/W} = .46 \text{ KW}$
- Multiply this answer by 24hour/day x 365 days/year if you are a continuous user. If you do not run your

oxygen continuously, multiply by the average number of hours per day and then by 365. In our example, $.46 \text{ KW} \times 24 \text{ hours/day} \times 365 \text{ days/year} = 4,029.6 \text{ KWH/Y}$ - This is the kilowatt hours you have used in the past year.

- You now multiply the above result by the cost per kilowatt hour your electric company charges you. (It may be listed on your bill or you could call the local office.) Let’s say they charge you 8 cents per kilowatt hour, but remember they vary widely depending on where you live. In our example, $4,029.6 \text{ KWH/Y} \times \$0.08 = \$322.37$. This is the amount it cost you to power your concentrator in the past year.

Thanks to Frank, NV



GOVERNMENT DIETARY GUIDELINES, UNINTENDED CONSEQUENCES AND PUBLIC POLICY

In the years following the government promotion of a low-fat diet, obesity in America has reached almost epidemic levels. Were the federal guidelines a direct cause, a catalyst for unintended consequences or merely a well-meaning but unimportant factor" In a study published in the March 2008 issue of the American Journal of Preventive Medicine, Paul R Marantz, MD, MPH, Elizabeth Bird, AB, and Michael H Alderman, MD, all from the Albert Einstein College of Medicine, suggest that the government issued these recommendations based on limited scientific data and assumed that no harm would result, but the evidence now suggests otherwise. They caution that without proper studies, such guidelines may be harmful.

“When dietary guidelines were initially introduced in the late 1970s, their population-based approach was especially attractive since it was presumed to carry little risk,” says Dr. Marantz. “However, the message delivered by these guidelines might actually have had a negative impact on health, including our current obesity epidemic.

Dr. Marantz and colleagues argue that if guidelines can alter behavior, such alteration could have positive or negative effects. They cite how, in 2000, the Dietary Guideline Advisory Committee suggested that the recommendation to lower fat, advised in the 1995 guidelines, had perhaps been ill-advised and might actually have some potential harm. The committee noted concern that “the previous priority given to a ‘low-fat intake’ may lead people to believe that, as long as fat intake is low, the diet will be entirely healthful. This belief could engender an overconsumption of total calories in the form of carbohydrates, resulting in the adverse metabolic consequences of high carbohydrate diets,” the committee wrote, while also noting that “an increasing prevalence of obesity in the United States has corresponded roughly with an absolute increase in carbohydrate consumption.”

Dr. Marantz and colleagues present data that support these trends; however, they are careful to note that this temporal association does not prove causation. Instead, says Dr. Marantz, “it raises the possibility of a net harmful effect of seemingly innocuous dietary advice. These dietary recommendations did not necessarily cause harm, but there is a realistic possibility that they may have.”

In a commentary published in the same issue of the American Journal of Preventive Medicine, Steven H. Woolf, MD, MPH, from Virginia Commonwealth University and Marion Nestle, PhD, MPH, of New York University, maintain that the guidelines are supported by decades of research. While they agree with Dr. Marantz that people often compensate for low-fat intake by consuming more calories, they disagree that the guidelines were wrong to encourage low-fat diets. "The guidelines were not the culprit," said Dr. Woolf, who believes that the government was right to share what was known about the dietary causes of disease.

Woolf and Nestle do not dispute that guidelines can have unintended consequences. However, they write, "When the prevailing message fails to achieve its intended aims or achieves the wrong ends, the solution is not to abandon the enterprise but to reshape the message to achieve desired outcomes."

Continuing the dialog, Marantz, Bird and Alderman respond in a further commentary, "When trying to mitigate potential harm from past guidelines based on inadequate science, issuing 'reshaped' guidelines with similarly inadequate science merely perpetuates past mistakes. It might sometimes be best to avoid translating flaccid arguments into rigid guidelines. Ultimately, this boils down to a difference in world view, much like the distinction between clinicians guided by the therapeutic imperative and those guided by the maxim 'first do no harm.' Of course, when the evidence is clear, beneficial interventions are always favored, and harmful interventions always shunned. It is when the data are unclear that challenges arise."

Marantz concludes, "As doctors, our first call is to do no harm. That's why we recommend that guidelines be generous in providing information, but more cautious in giving direction. Any directions should be based on the very highest standards of scientific evidence. After all, we expect that much from pharmaceutical companies before they bring a new drug to market." Source: AJPM



'UNSALES' REPS DIVERT DOCS FROM HIGH-COST DRUGS

States try to counter Big Pharma's influence, with limited success

Leigh Bradshaw could be mistaken for a drug-company sales rep as she pulls out charts and leaflets to tell Dr. Ernest Josef about the costs and benefits of various cholesterol-lowering drugs. But notably absent during her visit to his family practice is the swag typical of a pharmaceutical marketing arsenal — the free pill samples, the logo-emblazoned pads and pens, the free lunch for doctor and staff. That's because Bradshaw, a registered nurse, isn't trying to pitch a product for a drug manufacturer. She works for Pennsylvania taxpayers.

In a David vs. Goliath battle, Pennsylvania is among a handful of states trying — with modest results at best — to counter the pharmaceutical industry's multibillion-dollar marketing and cut costs for prescription-aid programs for senior citizens, who are bombarded with "ask your doctor"

advertising. "The more times they see it on TV, they feel that implies it is a better drug, which might not necessarily be the case," Josef said.

Josef, who is 45 and has been practicing medicine for 16 years, said he had already begun prescribing more generic cholesterol drugs in response to patient cost concerns, but that Bradshaw's presentation gave him more information to back up this practice.

State officials here say they are trying to ensure that patients get the most effective treatment. But driving the outreach is an effort to hold down expenses — in some cases by steering doctors to generics, in others by showing how lifestyle changes can sometimes be preferable to medication.

Pennsylvania is not the first state to try what is known as an "unsales" strategy, but its program, begun in late 2005, is considered the most extensive. The state spends \$1 million a year on its "unsales" force — 11 consultants, including some former pharmaceutical salespeople, assigned to the 28 counties with the highest concentrations of seniors enrolled in discount drug programs.

West Virginia ran a similar program in two cities from 2003 to 2005. Vermont has a program focusing on rural medical practices and South Carolina began one last fall, focusing on mental-health prescriptions.

Reps point out cost savings

In visits with doctors, Pennsylvania's consultants share findings such as:

- The cost of a 20-milligram daily dose of various cholesterol drugs can range from 13 cents for generics to \$4.53 for one of the more expensive brand names.
- A 30-day supply of some popular brand-name heartburn drugs can cost anywhere from \$111 to \$124, compared with just \$1 to \$2 for an equivalent supply of over-the-counter antacids.
- With generic drugs already accounting for two-thirds of all prescriptions, the pharmaceutical industry's main trade group questions the value of the "unsales" programs.

The group said care could suffer if steering patients to generics is the primary objective — which the programs deny. It also maintained that state consultants are not held to the same strict standards as drug company reps in their presentations. "A less expensive treatment may be more costly in the long run if it is not the best therapy for the patient," Ken Johnson, spokesman for The Pharmaceutical Research and Manufacturers of America, said in a written statement to The Associated Press. Bradshaw said generics are not pushed "unless the generic is the better choice," noting there are cases where brand-name products are deemed the most effective.

An uphill battle, at best

States are clearly outgunned.

The industry spends more than \$7 billion a year on direct marketing to doctors and employs about 90,000 salespeople — one for every five doctors, according to the Prescription Project, a campaign funded by The Pew Charitable Trusts to challenge pharmaceutical marketing practices.

Still, Pennsylvania reports some slight cost-control success in its assistance programs, which last year enrolled 360,000

people 65 and older and cost the state \$325 million, up more than 30 percent in the last decade. For patients of nearly 300 participating doctors, average monthly spending on some pain relievers dropped from \$400 to \$340 per doctor within six months after a state consultant visit, a preliminary analysis found. Another analysis found that the program saved Pennsylvania about \$572,000 a year alone on heartburn drugs. In both instances, the state took into consideration other factors influencing doctors' prescriptions — such as publicity about dangerous side effects and a strong push for generic drugs by insurance companies, said Thomas Snedden, director of Pennsylvania's prescription drug discount programs. The evaluations included control groups of doctors who either did not participate in the program or practiced in counties where it is not offered.

To develop Pennsylvania's program, state officials consulted with Dr. Jerry Avorn, a Harvard Medical School professor who pioneered the practice in the late 1970s. He determined that the best way to combat industry marketing was to try to beat them at their own game — by using the industry's basic tools to tell medical professionals about a broader base of medical research in a more engaging style than the pedantic lectures he endured as a medical-school student.

But states have found it hard to staff their programs, let alone measure the results. West Virginia used pharmacists to educate doctors but because it could not pay enough, the state had difficulty recruiting enough consultants to expand beyond Morgantown and Charleston, said S. Suresh Madhavan, a professor at West Virginia University's pharmacy school, which collaborated on the initiative. Vermont relies on a two-person staff and a \$50,000 annual budget which leaves little room for extensive evaluation, said Amanda Pinckney, a co-director of the program. The state is now considering partnering with Maine and New Hampshire. In her recent visit with Josef, Bradshaw presented data compiled by Harvard researchers, including a cholesterol chart showing when lifestyle changes should be pursued as opposed to medication, and a price comparison of various brand-name and generic drugs.

Doc appreciates the information

Josef said he was initially skeptical about the value of an "unsales" pitch but now appreciates getting a broader view of research into various classes of drugs. "It makes me feel more comfortable that I have some data to back up that the generic drugs are just as efficacious," he said. "It saves me time from having to do a lot of the research." He said patients do not put up much resistance to switching once he can assure them a generic is just as effective.

The state uses data it keeps on the number of prescriptions doctors write for certain drugs covered by the prescription-discount programs to identify potential participants, and passes it along to the consultants so they can set up visits, Snedden said. Participation in the program is voluntary, and doctors can earn continuing medical education credits from Harvard for doing so. "I think the physicians are very receptive to these calls, in large measure because it is the

state calling," Snedden said. "Physicians have a good deal of respect for the (prescription drug-assistance) program."

To no one's surprise, Bradshaw said she often runs into drug industry reps when she's out in the field. She said they are relieved when she tells them she works for the state, and not a competitor.

Source: MSNBC.Com



5 OF THE BEST NONTOXIC CLEANERS YOU AREN'T USING

Pantry staples have long been the safest way to tackle minor fixes and cleanups around the house, plus they have the benefit of being free. These solutions recall a time when Grandma dusted with old socks and clucked her tongue at wasting pennies. Her remedies might help keep our rivers a little cleaner, too.

Hot sauce cleans copper. Rub it on dulled copper, rinse with water, and polish clean with a soft rag.

Olive oil brightens up wood. Use a thin coat to hydrate worn, dried-out wood, as long as it was originally treated with an oil finish. Finish by buffing it in.

White wine removes red wine. The first step in removing red wine stains is dousing the spot with white wine. Just blot with a clean rag to absorb the spill.

Vinegar cleans brushes. Boil a cup of white vinegar and rest hardened bristles in it overnight.

Cornmeal soaks up grease. Cover a fresh grease stain with cornmeal, let it sit a few hours, and sweep it up.

Source: This Old House



BANANA PEELS CAN EVEN SHINE YOUR SHOES

The next time you reach for a banana, don't discard the peel. It has multiple uses, from soothing mosquito bites to shining shoes. Just read on:

Mosquito bites: Before reaching for the insect bite ointment, try rubbing the inside of a banana skin on the affected area. It has been reported by many at reducing swelling and irritation

Warts: A natural wart remedy. Cut a small piece of banana skin and place it on the wart, with the yellow side out.

Shoe Shine: Rub the inside of the banana skin directly on the shoe and polish with dry cloth.

Soil Enrichment: Adding banana peels to the soil helps tomato and green pepper plants to thrive. Banana peels contain potash and phosphorus. Chop peels and place several pieces into the hole before planting the seedlings and you'll have strong trunks and stems on your plants.

Rose Booster: Give your roses a boost by placing banana skins in a spray bottle with warm water. Allow the sealed bottle to sit at least 2 weeks or until fermented. Spray the liquid on rose bushes.

Liquid Plant Fertilizer: In a blender puree 1 part banana peelings along with 3 parts water. Pour liquid blend on the soil surrounding your garden flowers or potted plants. It makes a great boost for indoor container plants, too.

Animal Feed: Our mule Sally and horse, Apache love to snack on banana peelings. Don't forget to remove the sticker first!

Source: Farmer's Almanac



PAINTING A BETTER PICTURE FOR ALZHEIMER'S

More than five million Americans are living with Alzheimer's disease. It's a devastating illness that can rob people of a lot more than their memory. But finding a creative, engaging outlet may not only keep Alzheimer's patients actively using their brains, it may even improve their symptoms.

Psychologist Denise Sparks says art is a unique way to engage patients with Alzheimer's disease. "It offers them an opportunity for self expression and creativity," says Denise Sparks, Ph.D., a psychologist at Florida Atlantic University in Boca Raton, Fla. "They are very much cognitively engaged in what they are doing, the thinking about what they are doing."

Art teacher Pat Saidon has also seen the benefits. "I tell them OK, now you have to highlight. You have to color. You have to work this part. You have to change the color -- that's brain, brain, brain, brain exercise," Saidon says.

Studies show art eases the anxiety, confusion and frustration common in Alzheimer's. It strengthens analytical and logical brain function. One study shows half of patients in an art program had a significant improvement in symptoms.

Patient Myles Feldman has been painting for a year. "It exercises my brain on something that I never did before," Feldman says.

Gloria Chalfon was diagnosed with Alzheimer's four years ago. Her disease is progressing, but in art class, she thrives.

Fernando Moleon says it's been great to see his mother get excited about something again. "She's like a little schoolgirl getting up in the morning and jumping in the shower and 'Let's go!'" Moleon says.

The work created here is impressive, but it's also therapeutic. "This is absolutely better than any single pill and it comes in a bottle. It's only color," Saidon says.

Studies show art can also slow down the heart rate and lower blood pressure. To find out if there's an art program for Alzheimer's patients near you, Dr. Sparks says to contact the local Alzheimer's association.

Source: The Alzheimer's Association



HELP YOURSELF QUIT

If you smoke cigarettes, it is ingrained in everything you do. It is part of how you experience work and relaxation, meals and social occasions, and friends and family. On top of that, the nicotine in cigarettes is highly addictive — as much as heroin and cocaine. All of that makes quitting very hard. But if you have chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis, emphysema, or both, quitting is the only thing that can slow the progression of this disease. Millions have quit already. And you can, too.

In this issue of the COPD Experts Series from Spiriva.com, you'll find expert information and tips that may help you quit smoking. And learn how maintenance therapy can help you manage COPD while you try to quit.

Don't be hard on yourself

Quitting is a 2-step process

Tips to help you quit Managing COPD

Many people with COPD who still smoke feel guilty about it. They blame themselves for not kicking a habit that has made them sick and worried the ones they love. Some are ashamed that they haven't followed their doctor's advice about quitting. They put off checkups and avoid seeing their doctor. They tell themselves, "I'll quit first, and then get a checkup." But COPD doesn't go away. And it gets worse over time, especially with continued smoking.

Pulmonologist and COPD expert Dr. Frederic D. Seifer says, "You can't undo the past, but you can make changes for the better now." If you have COPD and you still smoke, seeing your doctor is the best thing you can do. "Some patients are ready to quit and some aren't," he says. "If they need more time I tell them, 'Call me when you're ready. I'm here for you.'"

Most people quit several times before they quit for good. But it is important to keep trying. Quitting at any age can improve your health. And there are programs and products your doctor can tell you about that can help you. "Go with an open mind," Dr. Seifer advises, "and be prepared to make a new start."

Research has shown that quitting smoking is a 2-step process. It includes:

1. Overcoming the physical addiction to nicotine
2. Breaking the smoking habit

To be successful you need to do both.

Nicotine replacement therapy and non-nicotine medications help you overcome the nicotine addiction so you can focus your energy on breaking the habit. Using them reduces or eliminates the symptoms of withdrawal.

Nicotine replacement products are sold over the counter and by prescription. They come in many forms, including patches, chewing gum, lozenges, pills, nasal sprays, and inhalers. Ask your doctor what might be right for you. Keep in mind that nicotine replacement medicines are taken after you quit. They replace the nicotine you would otherwise get from cigarettes.

There are also non-nicotine prescription medicines available that can help reduce your cravings for nicotine.

Quitting smoking helps stop the harmful damage to your lungs that is caused by cigarette smoking. Dr. Seifer says, "Stopping smoking slows down the rate at which the disease gets worse."

Here's what you can do:

- **Know why you want to quit.** Maybe you watched a friend suffer with lung disease, or you want to see your young grandchildren grow up. Having a reason that motivates you can increase your chance of success.
- **Choose a good time to quit.** Don't try to quit when you're under a lot of stress or around a holiday.
- **Try a nicotine replacement medicine.** Ask your doctor about patches, gums, and prescription treatments that will ease your need for nicotine. There are also non-nicotine medicines available by prescription.
- **Know and avoid your smoking triggers.** If you smoke

while you watch the news, go for a walk instead. Change your routine and dump habits like taking smoke breaks with coworkers.

- **Get support from others who understand.** Ask about support groups for people trying to quit, where you can talk or just listen.
- **Get some exercise every day.** For example, walking is a great way to reduce the stress of quitting. Exercise can help you feel better, boost your spirits, and help you stay trim.
- **Reduce the stress in your life.** Try deep breathing. Don't take on more duties than you can easily handle, at home or on the job.
- **Don't go it alone.** Ask family, friends and coworkers to help. Having someone to take a walk with or just listen to can give a needed boost.
- **Keep trying.** Studies show that anyone can quit smoking, but most people make several attempts before they succeed.

While you are quitting, be sure to ask your doctor about other healthy changes you can make to help keep your COPD under control. Your doctor may suggest treatment such as a daily maintenance therapy like Spiriva® HandiHaler® (tiotropium bromide inhalation powder), as well as other lifestyle changes to help you live healthier.

The important thing is to work with your doctor. Be open if something is troubling you, or if you don't understand. Don't be discouraged if you're not successful the first (or the next) time you try to quit. "The human body is amazing," says Dr. Seifer. "We can abuse the heck out of it, but if we make the right changes it can make a big difference." Working together, you and your doctor

Source: Boehringer Ingelheim Inc.



ALL ABOUT YOU: A GUT FEELING

What's in fruit, veggies, and whole grains that keeps your GI system on track? Fiber, for one thing. But here's another: prebiotics. Certain produce and grains are chock-full of the stuff. And that's a good thing, because prebiotics prompt the growth of healthy, keep-you-regular probiotic bacteria.

Gut-Friendly Foods

Bananas, berries, asparagus, garlic, wheat, oatmeal, barley, flaxseed, tomatoes, Jerusalem artichokes, onions, chicory, greens, and legumes (just to name a few!) all contain prebiotic carbohydrates -- nondigestible fiber that sets the stage for beneficial probiotic bacteria. And that's something you definitely want, because prebiotics do everything from protecting your bowels from toxins and infections to helping things move on through.

Other things to help you stay regular:

- Fill up on fiber -- at least 25 grams a day.
- Stay hydrated.
- Don't skip meals.
- Exercise! When your body moves, other things get moving, too. (Try easy-on-the-knees chi-gong.)
- Feeling sluggish? Read this article for more on

keeping things moving along.

Keep your body armed with the natural weapons it needs to battle infections and diseases. Eat prebiotics to start your own internal probiotic revolution and your GI will declare victory!

Source: www.Realage.com



EAT THIS AND THE POUNDS WILL DROP

Trying to lose a few? Aren't we all. You'll lose even more if you set out a plate of this before each meal: apple wedges. Eating a bit of high-fiber fruit -- like a small apple or pear -- before each meal is a proven weight-loss booster.

Fruit Booster

You've seen those ads for weight-loss pills that promise to help you lose even more weight when you diet. It's possible that apple wedges could give those pills a run for the money. In a recent study where women were divided up into fruit-before-meals and no-fruit-before-meals groups, the fruit group lost more weight -- even though they all followed the same reduced-calorie diet. The key? Choosing fruit that's high in fiber but low in calories (read: high water content, like apples).

Here's why fiber and water make a fabulous combo.

More Waist-Shrinking Diet Tips

Let's face it: We need all the help we can get when it comes to whittling our waists. Here are some other easy changes that help support that effort:

- Have a boiled egg instead of a bagel for breakfast.
- Change what, not how much, you eat. Here's what we mean by that.
- Hit the snooze button. A little extra sleep helps.

Source: RealAge



CHEWING THE FAT

Cut back fats carefully for diets

The last decade has been characterized by an explosion of information concerning dieting, and diets ranging from including greasy bacon (yet zero carbs) all the way to the 18-day grapefruit diet have been introduced.

While the effectiveness of many diets have yet to be proven, the consumption of "healthy fats" has been shown to be a critical factor in both burning fat and gaining muscle. Low-fat dairy products are an excellent source of these wonder-fats and are packed full of essential nutrients.

The idea of taking in fat to lose fat sounds ridiculous, but small amounts of dairy fat are beneficial and should not be completely slashed from one's food regimen. According to "Men's Health Magazine," if the body is starved of adequate dietary fat it can turn to muscle as a fuel source during a workout. This means the goal is to burn as much fat as possible during exercise while minimizing muscle breakdown. Healthy fats are also necessary to absorb the nutrients in other foods, as well as protecting joints.

Dairy products like cheese, yogurt and milk provide calcium, which in addition to supporting bone health and preventing age-related osteoporosis can actually increase one's metabolism of fat. A study at the University of Tennessee at Knoxville found that calcium-rich diets correlate with amplified fat loss.

Found on nearly every “gain-muscle-and-burn-fat” diet, cottage cheese is a bodybuilder's best friend. Packed with slow-digesting proteins, cottage cheese consumption before going to bed prevents muscle catabolism, or breakdown, that occurs while one sleeps when the body is starved of protein.

Studies have even linked dairy consumption to decreased blood pressure. A study from the American Heart Association published in the journal "Hypertension" found that those who consumed three or more servings of low-fat dairy per day had significantly lower systolic blood pressure (the top number) than those who ate less than half a serving per day.

This is not to say that one should start buying whole milk instead of low-fat milk or that an extra effort to eat more nachos caked with cheddar cheese should be made every day.

s with all foods, moderation is critical, and eating too much dairy fat will obviously be detrimental to gaining muscle mass and burning fat – "Muscle and Fitness Magazine" recommends keeping fat levels around 20 to 30 percent of the total daily caloric intake.

However, not all fats are created equal, and healthy fats are vital for your overall well-being.

Source: The Daily Evergreen



WHOLE GRAINS HELP DEFLATE BELLY ROLLS

Study of obese adults also found reduced inflammation in blood vessels

Cutting calories helps people lose weight, but doing so by filling up on whole grains may be particularly heart-healthy, new research suggests.

In a study of obese adults at risk of heart disease, researchers found that those who trimmed calories and increased their whole-grain intake shed more belly fat and lowered their blood levels of C-reactive protein or CRP.

CRP is a marker of chronic, low-level inflammation in the blood vessels, and both abdominal fat and CRP, in excess, are linked to heart attack and stroke.

In contrast, dieters in the study who mainly ate refined grains, like white bread, were able to lose weight, but they trimmed less fat from the middle and showed no change in CRP.

The findings offer yet more incentive for Americans to opt for whole grains over highly processed versions, according to the researchers.

"This is the first clinical study to prove that a diet rich in whole grains can lead to weight loss and reduce the risk of several chronic diseases," Dr. Penny Kris-Etherton, the senior researcher on the study, said in a statement.

She and her colleagues at Pennsylvania State University report the findings in the American Journal of Clinical Nutrition.

In general, experts recommend eating whole grains — such as oatmeal, brown rice and barley — rather than refined grains, like white bread and other products made from white flour. Whole-grain foods retain more of the nutrients and fiber components of the grain.

This fact might explain why dieters in the current study

showed added benefits when they ate whole grains, according to the researchers. For example, fiber-rich foods may have kept participants' blood sugar levels more stable throughout the day, and this, in turn, may have lowered their CRP levels.

Possible antioxidant benefits

Alternatively, CRP might have dropped because of the antioxidant nutrients that are present in whole grains but depleted in refined ones.

The study included 50 obese men and women who had metabolic syndrome, a collection of several risk factors for diabetes, heart disease and stroke — such as abdominal obesity, high blood pressure and high blood sugar.

All of the study participants cut calories for 12 weeks, but half were instructed to strive for whole grains, while the rest were told to choose refined grains. The whole-grain group was told to look for products with "whole grain" listed as the first ingredient on the label.

In the end, the average weight loss was about 8 to 11 pounds in both groups. However, the average CRP level dropped by 38 percent in the whole-grain group, while remaining unchanged in the refined-grain group. In addition, while both groups showed a similar change in waistline size, the whole-grain dieters showed a greater reduction in the percentage of fat around the middle.

The researchers recommend that consumers look at labels and be careful to choose products that are good sources of whole grain.

"There are a lot of foods around that claim they contain whole grain but are not really major sources of whole grain," Kris-Etherton said. She suggested looking for foods like oatmeal, breakfast cereals made from whole grains, whole-wheat pastas, granola and popcorn.

As a general rule, she said, consumers should buy grain products that are at least 51 percent whole grain. Products that put health claims about whole grains on their labels are required to contain at least that much whole grain. Source: MSNBC.com



HEALTH TIP: ZINC IN YOUR DIET

Zinc is a mineral that the body needs to help the immune system, in wound healing, and in the breakdown of carbohydrates. Second only to iron in its concentration in the body, zinc is found in protein-rich foods such as meat, peanuts and peanut butter, and legumes.

If you're not getting enough zinc, here's a list of possible warning signs, courtesy of the U.S. National Library of Medicine:

- Slow growth rate.
- Slow-healing wounds, lesions on the skin, and persistent infections.
- Hair loss.
- Abnormalities in your ability to taste and smell.
- Difficulty seeing in the dark.
- Insufficient hormone production in men.

Source: MDLinx



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.



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