

# EFFORTS

*Emphysema Foundation For Our Right To Survive*



Emphysema Takes Your Breath Away

March 2005

## **COPD ON STEEP RISE AMONG WOMEN; 26,000 NEW CASES SINCE 2001**

The Lung Association is launching a public service announcement (PSA) campaign today, focusing on the symptoms of chronic obstructive pulmonary disease (COPD) - an under-diagnosed disease that affects 714,000 Canadians, and is rapidly rising among women.

"When it comes to lung health in women, we're way behind, much like cardiovascular health and women was 20 years ago," says Dr. Anna Day, The Lung Association's medical spokesperson and Director of the Gender, Asthma and COPD Program at Sunnybrook and Women's College Health Sciences Centre and the University of Toronto. "Over half of the people living with COPD remain undiagnosed and this is a huge area for concern."

Many hospitalizations could be prevented and the mortality rate decreased if Canadians were more aware of the COPD symptoms and diagnosed early on. Based on recent prevalence studies, the true number of COPD patients in Canada is likely well over 1 million.

The Lung Association's PSA campaign includes print and radio spots emphasizing the symptoms of COPD. To download the PSAs, visit: <http://www.on.lung.ca/PSA/COPD/>.

Symptoms of COPD include: a regular cough and coughing up phlegm; shortness of breath when doing simple chores; wheezing at night or when you exert yourself; and frequent colds that persist longer than those of other people you know.

.....newswire.ca



## **COMPOUND EASES LUNG INFLAMMATION CAUSED BY SMOKING**

A compound that interrupts the chemical chain reaction that causes tobacco smoke to inflame the lungs has been identified in laboratory studies with rats by researchers at the University of California, Davis.

The research team, headed by respiratory biologist Kent Pinkerton and entomologist Bruce Hammock, hopes that the compound will have a similar effect in humans and lead to therapies for treating inflammation in the lungs. Their findings are published online in this week's issue of the Proceedings of the National Academy of Sciences.

Cigarette smoking is associated with a number of diseases, ranging from bronchitis to emphysema, collectively known as chronic obstructive pulmonary disease, or COPD. More than 20 million people in the United States suffer from COPD, which is

the fourth leading cause of death in the U.S. Researchers suspect that, in some cases, COPD can be traced back to tobacco smoke setting off the inflammation of the lungs and airways. The inflammation process injures cells and causes an increase in mucous cells and mucus secretion. It also sometimes results in cancerous cell growth. These processes are being studied by the Pinkerton group.

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## **NEW INSIGHT INTO CHRONIC LUNG DISEASE**

Research into the mechanism of chronic obstructive pulmonary disease offers a potential new approach to the condition.

Chronic obstructive pulmonary disease (COPD) is a condition in which lung tissue is gradually destroyed, giving rise to breathlessness and disability. The major risk factor for COPD, which is also known as chronic bronchitis and emphysema, is smoking. And the usual treatment is anti-asthma drugs.

Now researchers at the Royal Adelaide Hospital, Australia, announce research that shows what really goes on in the lungs of those with COPD. They compared patients with COPD, both smokers and ex-smokers, with people who had healthy lungs. There was far more apoptosis, a form of cell death, in those who had COPD. The lungs of those with COPD also had fewer of the scavenger cells which clear dead cells away.

It may be that some people have a natural tendency to apoptosis which makes them more vulnerable to the effects of smoking. This might explain why only some smokers develop COPD. What is more, therapies based on blocking apoptosis, which are already being developed, may turn out to be helpful for those with COPD.

.....healthandage



## **Patients with Serious Illness Appear to Adapt Well**

Most people who live with serious disability or illness, such as kidney failure, appear to adapt well and maintain a healthy outlook on life, new research reports. This trend may be surprising to some -- the report also found that people without serious illnesses tended to underestimate the level of happiness in these patients. "We think it is encouraging that for at least some illnesses, life seems to (eventually) go on and that people come to experience good and even normal mood levels," study author Dr. Jason Riis of Princeton University in New Jersey told Reuters Health. "We cannot adapt to anything. But we are generally more resilient than we think," he said. In the *Journal of Experimental Psychology*, Riis and his

colleagues note that this is not the first study to show that people can adjust to good and bad life events. For instance, a nearly 30-year old study found that paraplegics were not that much less happy than lottery winners. In the current study, Riis and his colleagues asked 49 dialysis patients to rate their moods on a regular basis. These patients were matched by age, sex and race to 49 people not on dialysis who were asked to imagine what their life would be like on dialysis.

Eighty-two subjects completed the study. The investigators found that dialysis patients were generally just as happy as people not on dialysis. While healthy people expected that they would have low moods most of the time if they were on dialysis, dialysis patients had low moods "quite infrequently," Riis said. This finding suggests that emotional highs and lows gradually dissipate over time, Riis noted. For instance, getting married usually makes people feel great, while getting divorced often has the opposite effect. "But over time the emotions of the new circumstance stabilize so that being married is not that great and being divorced is not that bad," he explained. Similarly, the dialysis patients said they believed they would be happier if they had never developed kidney disease -- an unlikely event, given that they were generally just as happy as the subjects without kidney disease, Riis noted.

This suggests that patients also don't realize that the happiness they would feel at being cured would eventually fade over time, he said. In another experiment, Riis and his team asked people who were or were not on dialysis to rate their moods periodically, and then recall later how they felt on those days. They found that dialysis patients remembered fairly accurately how they felt, while healthy people tended to rate their previous moods as worse than they actually were.

This finding offers another, more subtle explanation for why generally healthy people believe that being very ill can give you a negative outlook on life, Riis noted. "If healthy people underestimate their own moods, they would also tend to underestimate the moods of other people, including patients," he said. Just why healthy people do this is somewhat of a mystery, Riis noted. "We speculate that the hardships of illness may make sick people more likely to savor good moments, but we do not have evidence for this,"

.....Journal of Experimental Psychology



### **TEST WOULD CHECK FOR ANEURYSMS NEAR HEART.**

Older male smokers and ex-smokers should get at least one ultrasound scan to make sure they do not have a developing aneurysm near the heart, a team of U.S. experts advised on Monday.

Nearly 70 percent of men over 65 are or have been smokers and would benefit from such a routine check, the U.S. Preventive Services Task Force said.

"This is an important recommendation because evidence now exists that screening high-risk men for abdominal aortic aneurysms can reduce deaths from aneurysm," said task force chairman Dr. Ned Calonge, state epidemiologist for the Colorado Department of Public Health and Environment.

"One of the most important things men and women can do for their health is to never start smoking and to quit if they do. People who have a family history and might be at risk for abdominal aortic aneurysm should discuss their concerns with their physicians."

### **Women, non-smokers at lower risk**

Women and non-smokers are at a much lower risk of an aortic aneurysm, a weakening and then rupture of the main artery leading out of the heart. Most people with ruptured aneurysms die before they can get help.

Writing in the Feb.1 issue of the Annals of Internal Medicine, the task force - an advisory and review group made up of private sector prevention and primary care experts - said new evidence has shown that screening and surgery to repair large aneurysms before they rupture can save lives.

.....msnbc



### **MARROW HAS CELLS LIKE STEM CELLS, TESTS SHOW**

Researchers in Boston have isolated a kind of cell from human bone marrow that they say has all the medical potential of human embryonic stem cells -- a claim that, if verified, could shake up the debate over human embryo research that has divided the country for the past six years.

But not all scientists are convinced the cells are as versatile as they appear to be.

Tufts University researchers used specialized cell-sorting machines to pluck the peculiar cells from samples of bone marrow obtained from three different donors. Tests suggested the cells are capable of morphing into many, and perhaps all, of the various kinds of cells that make up the human body. That is a hallmark of embryonic stem cells, which doctors hope to use to cure a wide variety of diseases but which have stirred controversy because human embryos must be destroyed to obtain them.

When a batch of the newly identified marrow cells were injected into the hearts of rats that had experienced heart attacks, some of the cells turned into new heart muscle while others became new blood vessels to support the ailing hearts. Treated rats ended up with more than twice as many small vessels feeding their hearts than those given a dummy treatment. They also ended up with less scar tissue, which can interfere with cardiac function.

Previous experiments have shown that mixtures of human bone marrow cells can help rebuild both hearts and blood vessels. But the new report appears to be the first to show that both of those repairs can be accomplished by a single type of cell.

Additional experiments in laboratory dishes showed that the new marrow cells can also become nerve-like cells. Taken together, the findings suggest that these adult stem cells are, like embryo cells, able to rebuild the full spectrum of cells and tissues, depending on what is needed most.

"I think embryonic stem cells are going to fade in the rearview mirror of adult stem cells," said Douglas W. Losordo, the Tufts cardiologist who led the effort described in the

February issue of the Journal of Clinical Investigation. Bone marrow, he said, "is like a repair kit. Nature provided us with these tools to repair organ damage."

Several stem cell scientists said they were impressed.

"This is a really very nice piece of work," said James F. Battey, who heads the stem cell program at the National Institutes of Health. "It's very impressive, very interesting and I think very significant."

But Battey and several other scientists said it is too soon to abandon embryonic cells: "It still remains the case that we're very early in the game, and I can't say the [new] results are absolutely airtight. At the NIH, we'd like to see this type of stem cell and other bone marrow stem cells and research on human embryonic stem cells move forward."

The new work builds on a growing body of evidence that adult bone marrow contains cells that -- even if not as versatile as embryonic cells -- can at least speed the repair of injured hearts and vessels. That is a tantalizing finding, given the huge toll of heart disease. About 300 patients have been treated experimentally with various mixtures of cells from bone marrow, and many showed evidence of improved heart muscle vitality.

More controversial have been claims that bone marrow contains cells that, individually, have the capacity to turn into any kind of tissue in need of repair -- a trait that embryonic stem cells possess.

The most convincing case that such cells exist has come from University of Minnesota biologist Catherine M. Verfaillie. For several years now, she has been studying a kind of marrow cell that is very rare and difficult to cultivate in the laboratory. Her work has suggested the cells have all the potential of embryonic stem cells and even have an advantage: They seem incapable of growing into tumors, as embryonic cells occasionally do.

But other scientists have been unable to confirm Verfaillie's findings. And even she has conceded that her cells may be too rare and finicky to be of practical value.

In an interview, Verfaillie said she is not sure from the latest report that Losordo's cells are different from hers. "In a lot of respects, these cells 'smell' very much like the cells we've described in the past," she said.

If nothing else, Losordo said, his are a lot easier to grow. "We've got freezers full of these things now," he said.

John D. Gearhart, a stem cell scientist at Johns Hopkins Medical Institutions in Baltimore, said the new work provides "some of the strongest evidence to date" that marrow may contain cells with the same capacities as embryonic stem cells. But he noted that similar claims had ultimately proved to be incorrect in the past.

In some cases, dyes used to track the fate of certain cells leaked into other cells, creating a false impression that one had turned into the other. In other cases, marrow cells fused with heart cells, again creating the misimpression that the former had literally transformed into the latter.

"I think we need to be a little circumspect about our conclusions here," Gearhart said. "The contention that we have

no need for embryonic stem cells is a very premature statement."

.....The Washington Post



### **EFFECT OF BRONCHOSCOPIC LUNG VOLUME REDUCTION ON DYNAMIC HYPERINFLATION AND EXERCISE IN EMPHYSEMA**

Endobronchial valve placement improves pulmonary function in some patients with chronic obstructive pulmonary disease, but its effects on exercise physiology have not been investigated. In 19 patients with a mean FEV1 of 11.9% predicted, studied before and 4 weeks after unilateral valve insertion, functional residual capacity decreased from 7.1 to 6.6 L and diffusing capacity rose from 3.3 to 3.7 mmol · minute. Cycle endurance time at 80% of peak workload increased from 227 to 315 seconds. This was associated with a reduction in end-expiratory lung volume at peak exercise from 7.6 to 7.2 L.

In a subgroup of patients in whom invasive measurements were performed, improvement in exercise capacity was associated with a reduction in lung compliance. Endobronchial valve placement can improve lung volumes and gas transfer in patients with chronic obstructive pulmonary disease and prolong exercise time by reducing dynamic hyperinflation.

.....ajrccm



**IF YOU HAVE CARDIOVASCULAR LIMITATIONS** or health issues that make exercising more of a challenge, you may be wondering how you can have an adequate workout.

The good news is that there is a wide variety of exercises to suit almost everyone. So regardless of most conditions, you can find the exercise regimen that's best for you and your heart.

To play it safe, I always advise that you make sure all of your personal health concerns are taken into consideration by you and your physician prior to starting any sort of exercise program. Your doctor (or if you've had surgery, your cardio-rehab coordinator) can tell you what your optimum heart rate should be during exercise, and what type of exercises will be best for you.

#### **Remember—The Tortoise Beat the Hare**

Starting out slowly is the best way to go... whether exercising for the first time in years, or continuing your daily exercise routine. Professional athletes and trainers know that your body needs to warm up in order to prevent injury. Always start with 5-10 minutes of warm-ups such as walking in place or gently riding a stationary bicycle. This raises your heart rate gradually and lubricates your joints.

Then stretch slowly to loosen muscles, tendons, and other tissues so they are more flexible and absorb shock better. Stretch your neck, arms, and legs gently, without bouncing. Relax, and make sure you breathe deeply without holding your breath.

Any low-impact activity involving repetitive movement of your large muscle groups such as walking, biking, swimming, climbing up and down stairs...even seated jumping jacks (no

jumping, just continuously move your extended arms above your head and down again) will work effectively. You may just need to start out with 10 to 15 minutes every other day for the first week or two, slowly working your way up to a longer routine over the next couple of months.

If you are not able to walk, bike or swim, try some of these other exercises that have enormous physical, metabolic, and psychological benefits:

**Stretching exercises such as yoga, Tai Chi, or Pilates.**

(Note: There are excellent videos including those for people with physical limitations. One is by a 93-year-old, physically-fit woman named Marguerite Watson. You can order her videos online at [www.intrex.net/exerciseforseniors](http://www.intrex.net/exerciseforseniors) or by calling (919) 918-3446.)

**Resistance Bands** – A great way to strengthen and tone - these are inexpensive, lightweight and low impact.

To do armchair push-ups: place both hands on the arms of the chair while sitting, lift yourself up to standing, then lower yourself back down again. Repeat for 10-20 repetitions up to 3 times.

Doing wall push-ups. Stand a little more than arms length from a wall. Extend your arms, keeping them at shoulder height. With your arms straight, lean forward and place your palms against the wall. Lower your body towards the wall and back again, using only your arms to support your weight. Repeat as above.

These types of exercises improve your overall cardiovascular health because when you start moving, so does your blood. Your heart pumps at a moderately elevated rate that helps your cardiovascular system work better and become stronger, and your joints don't get overly stressed from constant, high impact, either.

By combining exercise with smart diet choices along with nutritional supplements such as a good antioxidant-rich multivitamin, you'll create a recipe for overall heart health.

**Work Your Heart Comfortably**

The trick is to keep it comfortable. Know your limits, but don't let them stop you.

Exercise, while it should get your body working, should not be painful. If you feel a new pain, or an exacerbation of a chronic one, stop that exercise immediately. If at any time you don't feel right, stop. Exercising safely is paramount.

Exercise doesn't have to be boring -- vary your routine! Try walking/biking different routes or to different destinations such as a park, around a lake, or on a trail to feel stimulated enough to exercise regularly.

Fly-fishing is my passion, and I cover miles walking or wading along river banks while doing it. But when I'm home, I walk my dogs as often as possible.

The main thing is to find types of movement that are comfortable and fun...and just do them...alone, with a partner, or with a group.

It's never too late to try something that can be fun and healthy for you. Why not begin giving the gift of exercise to yourself this month? Your heart will be happy that you did.



## HEALTH CARE IN THE PHILIPPINES

The government's meager resources for health mean that more and more Filipinos will resort to self-diagnosis and medication. The poor will be at a disadvantage as they do not have access to health information and services. The wealthy, however, will be healthier.

**Filipinos have** long been prone to self-diagnosis and self-medication, but in the years to come, D.I.Y. health care may become even more pronounced. After all, when society does not assume enough of the burden of health care, individual responsibility and self-preservation become the norm.

Compared to its counterparts in neighboring countries, the Philippine government has not been spending enough for the health needs of its people. According to official reports, our government allocates only 0.9 percent of total spending on health. This is lower than Thailand (11.6 percent), Malaysia (6.5 percent), and Vietnam (6.1 percent), and even less than what the economically distressed nations of Indonesia (3.0 percent), Cambodia (16 percent), and Bangladesh (8.7 percent) allocate for the health of their peoples.

It is not clear whether our government has no money because it is spending on the wrong things or cannot raise more revenues. What is certain is this: because the national government scrimps on health care while local government resources for health are limited and health insurance, inadequate, households end up bearing the bulk of the burden of health spending. Because public spending is deficient, more private resources have to pay for health expenditures.

In the coming years, we can only expect more self-spending activity where families make more out-of-pocket payments for services. And while self-sustaining and self-financing of health care are already becoming extensive, more people will rely on their immediate circle of contacts for remedial measures. Self-care and self-treatment of health conditions will be much more common. In this do-it-yourself setting, we would not even have to go to hospitals or diagnostic laboratories. It would be more convenient and much faster to call on family and get test kits from the neighborhood pharmacies. In this information age, it is also much easier to surf the Internet and access medical-information websites.

For the wealthy, D.I.Y. health care would work. Health is wealth, and the wealthy will be even healthier in the next 10 years and even beyond because of more self-education and self-diagnosis, better self-care and self-treatment, and increasing self-sustenance and self-financing. For the poor, however, even the simplest health problem could deteriorate into a matter of life and death because of their lack of access to health information and services, which in turn could lead to improper self-diagnosis and medication.

Health is a luxury for the needy. For them, thinking about what they can expect 10 years from now may even be difficult, when all they can hope for is just another day. It is an arduous challenge to improve the well-being of the ailing because of the divide among social classes, the gap between the rich and poor, and the disparity among first-class and lower-class communities.

**Government health** indices suggest that over the last 15 years our overall health status has improved. Tuberculosis and other infectious diseases are no longer the top causes of death and illness in our country. Diarrhea and other problems associated with environmental sanitation have decreased with improved water distribution and supply. The family planning program has provided a wide range of family planning services to many women of reproductive age, around 47 percent of whom were reported to be using contraceptives in 2000.

Yet while major health improvements have been evident in the last few decades, their pace and scope are now at risk of being overwhelmed by a growing population, a constrained economy, and a major challenge in health and development—the yawning gap between the few people who have so much and the many who have so little.

The "improvement in the economy" reported at the macro level excludes the fact that the Philippines has one of the most unequal income distributions in the world. Although reduced in many parts of the world, inequity is becoming worse in this country. In 1994, the family income of the richest ten percent of our people was 19 times higher than that of the poorest ten percent. Since then, that same affluent group has continued to increase its share of family income while the family income share of the majority of Filipinos has decreased. Economic improvement without equity cannot contribute substantially to human health and development, but there is no indication the trend will change anytime soon.

The differences dividing social classes have rarely been minimal. There is not only an information divide where the rich have the best computers and the best sources of knowledge—the poor are not even provided enough teachers, classrooms, and school books for basic elementary and high school education. It is not only harder for the poor to receive health education, it has also become much harder for them to understand the scant health information that is available.

When it comes to the national government's approach to health, lack of money is only half the problem. Of the little that is set aside for health, just a pinch is allocated for public health and preventive-care services like family planning or reproductive health or even for diseases like malaria.

Even today, lower-income households see more abortions, unwanted pregnancies, and maternal deaths compared to those in the upper classes. Yet family planning and health information are focused in health centers and in messages placed in magazines that are not always accessible to the poor.

It is true that there is almost equal access across income classes for free family planning commodities like pills, condoms, and injectables. But only those who have money can avail themselves of the more reliable family planning services that have to be paid for, such as longer-term contraceptive methods like the intra-uterine device (IUD) or voluntary surgical contraception for males and females.

The poor are still ravaged by tuberculosis or TB and pneumonia. Although these diseases are no longer among the top three causes of death in our country, they are still in the top 10. The World Health Organization estimates that the Philippines has around 250,000 new cases of TB each year and

the second highest number of tuberculosis cases in this region of Asia.

And while water supplies have improved, diarrhea is still the top cause of illness here, with one out of every 100 persons affected each year. It's easy enough to figure out who are likely to have it. The more expensive housing in upper-class villages and communities can boast of so much water that golf courses are always green and swimming pools are kept full of clean water. On the other side of the fence are rural villages and teeming slums with dirty water and pitiful environmental sanitation.

**Such disparity** is also evident among central cities and peripheral provinces, or first-class and lower-class municipalities. To make matters worse for the poor, more government services and accredited health-care facilities are in the affluent areas. These disparities are unlikely to even out in the coming years. Among members of the Philippine Health Insurance Corporation (PhilHealth), for example, the wealthy and healthy are currently more likely to avail themselves of the insurance benefits than the ill but impoverished, who cannot afford to lose a day's pay or the bus fare to consult a doctor. This trend will likely continue in the next decade.

When family planning and health-care providers do not reach out to the poor and those living in more peripheral areas, it is unlikely that the underserved would spare the extra cost of transportation and access to information and services. Not surprisingly, the number of infant deaths and maternal mortality in our country continues to be high. Apart from a disturbing picture of dying babies and dying mothers, the University of the Philippines Population Institute estimates abortion rates as ranging between 320,400 to 480,600 annually. These figures translate to one abortion for every five to six pregnancies.

The number of women hospitalized for high-risk deliveries and some even dying because of abortion and complications in our country is huge. Based on reimbursements records, these account for over 30 percent of PhilHealth's spending and amounts to around P1.15 billion each year.

Women from households with higher income have greater use of, and possibly better access to, family planning services. Several studies already show that the number of children that each woman has is related to household-income levels. Richer couples have on average two children, which is the number that most women want. But while married women in poor households say they had wanted around three children at most, majority of them end up with at least one or two more, with many even having more than five children. These figures may or may not include the young children who have died. The rate of deaths of infants and under-five-years-old among the poor in the Philippines is double those among affluent Filipino households.

It has been suggested that it is not only the absolute amount of income that is important for health but also the relative disparity with which the income is distributed. One possible explanation for this is that the social stress associated with such inequity can lead to more smoking, alcohol abuse, and other unhealthy behaviors. It is also conceivable that when

too much of the total income is in the hands of the rich who can afford private education and medical care, there is less money for the poor. There is simply less interest among those with money to contribute to funding for public education, public health, and social services. (Blame that partly on growing cynicism, which can kill philanthropic instincts. But plain greed and selfishness play a part, too.)

The correlation between the distribution of disease and the disproportionate allocation of resources is supported by another observation: there are fewer deaths when there was less inequity. This reflection is based on what has taken place in countries with increasing incomes but constant class differentials, and compared with poorer but more egalitarian societies. Hidden behind the health situation reported by our statistics, for example, is the marked inequity and the wide disparity in the health status among Filipinos. According to the Department of Health and our health administrators, there are persistent, large variations in health status across population groups and geographic areas. Again, while there are pockets of excellent health among the rich, the burden of disease is heaviest on the majority who are poor.

**The irony** is that as the health and health care divide widens between the haves and the have-nots, we are seeing an exodus of health professionals headed for work overseas. This trend is likely to continue in the coming decade. Would that we could count on steady support from the countries that benefit from our countrymen's labors and who have drawn our resources. Yet it is difficult to beg for aid and assistance from foreign donors and multinational corporations. It is more difficult to find solace in the infusion of dollar remittances from overseas workers, including those who should be looking after our own people's health, when these come at the expense of families separated by seas and continents and of health institutions in dire need of trained and skilled personnel.

Still, for every 3,000 physicians who yearn for the chance to work abroad, many do choose to stay. For every 300 medical graduates pining for positions in expensive medical centers there are those who would work among the poor. For every 30 successful health professionals who have left our country there is someone who will come back home.

It is, however, distressing to realize that choosing to stay means a harder life for a physician's family. It is depressing to witness a young nurse or midwife walking in mud as the latest car models roar by. It is disheartening to have barangay doctors reading torn medical books under the flickering light of a kerosene lamp while many other people enjoy a sparkling nightlife. It is demoralizing to be in a country that chooses to break up families and offer our health workers to the uncertainties of foreign employment rather than spending for the means to maintain the human resources that are vital to the health of our people.

Fifteen years ago, I worked as a rural health physician in Kabugao, in Apayao province. My wife was the chief of the district hospital. We lived there for two years with our daughter, who was just 11-months old when we first arrived. Our next child, my son was conceived in that part of the Cordillera mountains. The number of doctors in Kabugao has barely

increased since we left, and it may stay that way (or even see a decline) in 2015. With the continuing lure of better pay and better opportunities in the city hospitals of our country and the health centers in other countries, how can there be more health workers in places like Kabugao? Can I myself even care enough to go back to work in the municipal health office I left so many years ago?

I may hesitate, but fortunately there are hardier souls out there. Even now thousands of rural health workers continue to labor in the most difficult and trying circumstances, while there are still doctors who can barely make both ends meet but are sticking it out in the hinterlands. Thousands more nurses have surrendered to a lonely life away from home-not in some foreign land, but in areas in the Philippines they know need them most. These are the heroes who may yet bridge the health gap between the rich and the poor and help heal the wounds of our society.

....Victor, Manila



### **VAGONIXEN(TM)**

Vagonixen(TM) is Duska's proposed drug for the treatment of chronic obstructive pulmonary disease (COPD) and chronic cough. Data obtained in a preliminary study sponsored by Duska with an existing compound that had been researched by others for clinical indications not related to pulmonary disorders, have shown that it could serve as a suitable candidate for Vagonixen(TM). In light of the significant commercial potential for an effective treatment of COPD and cough, Duska is focusing on this early stage but promising project.

"I am encouraged by the progress that Duska is making on a number of drug development fronts," said Dr. Amir Pelleg, Duska's President and Chief Scientific Officer. "Duska looks forward to an active and productive 2005 as we move forward with various clinical and pre-clinical projects for our drug product candidates."

.....medadnews



### **AAHOMECARE WILL ASK CONGRESS, ADMINISTRATION TO FOCUS ON HOMECARE AS A SOLUTION TO THE GROWING HEALTHCARE CRISIS IN THE US**

As the President's 2006 budget and Congressional debates focus on healthcare costs for seniors and the disabled, the American Association for Homecare (AAHomecare) will ask the administration and new Congress to support homecare as a patient-preferred and cost-effective solution to the nation's growing healthcare crisis.

Earlier this week in his first speech as the new Secretary of Health and Human Services, Michael Leavitt stressed the importance of homecare in delivering cost-effective care in the Medicaid system. Leavitt echoed last year's emphasis by HHS on "rebalancing" institutional care with home- and community-based care through the New Freedom Initiative and other programs developed by the Centers for Medicare and

Medicaid Services (CMS). Kay Cox, President and CEO of the American Association for Homecare, met with Secretary Leavitt earlier this week.

.....medicalnewstoday



## **UK RESPIRATORY PATIENTS NEED BETTER CARE: STUDY**

Patients suffering from the serious respiratory disease COPD are not receiving optimum care and more than 1 in 10 who are admitted to hospital die within 90 days, health experts said on Wednesday.

Chronic Obstructive Pulmonary Disease, which includes chronic bronchitis and emphysema, is the fifth most common cause of death in England and Wales.

**But doctors say the illness is not given enough priority in the state-funded National Health Service.**

"Care received by COPD patients remains a lottery with many not benefiting from the potentially life-saving and life-enhancing care provided by a specialist respiratory team," said Dr Mike Roberts, of the Royal College of Physicians (RCP).

In the first national audit of the illness by the RCP and the British Thoracic Society, Roberts and his colleagues found that COPD accounts for more than 10 percent of all acute hospital admissions but more than half of patients are not under the care of a specialist.

**Deaths rates, length of stay and readmissions to hospital vary greatly.**

Smoking is the leading cause of COPD. A smoker is 10 times more likely to die of the illness than a non-smoker. It begins with a persistent cough and increased mucus. Eventually COPD leads to fatigue, shortness of breath and difficulty breathing as the lungs are destroyed.

Deaths from the illness have been rising in most countries. It afflicts people over 40 years old who have been smoking for many years and contributes to other illnesses such as pneumonia, heart disease and stroke.

"This audit highlights the huge problem of COPD in the UK," said Helena Shovelton, chief executive of the British Lung Foundation.

"There are more than 900,000 people diagnosed with COPD in the UK -- and a suspected further 1.5 million undiagnosed -- and it is time that the government made COPD a priority," she added.

The experts said the findings reveal the need for more respiratory physicians and specialist nurses to improve the care of COPD patients.

.....ABC News



## **BC PHARMACARE IGNORES MEDICAL EVIDENCE TO BEST TREAT COPD**

The British Columbia Lung Association and the BC Thoracic Society today called on Premier Campbell and his government to challenge BC PharmaCare's decision not to

reimburse patients requiring tiotropium (known by its brand name Spiriva), a prescription medication that is strongly recommended by leading medical specialists in Canada and abroad as foundation maintenance therapy for patients with advanced Chronic Obstructive Pulmonary Disease (COPD).

COPD blocks the lungs' airways, slowly suffocating patients. It is the fourth leading cause of death among men and the fifth leading cause of death in women. Last year more women died from COPD than from breast cancer. It is the only common cause of death that continues to increase in North America. It is estimated that by 2010, COPD will be the third most common cause of death in the world and that women will suffer from it twice as often as men.

"The British Columbia Lung Association, in concert with the Canadian Lung Association, is deeply concerned that the clinical benefits of Spiriva have been ignored by PharmaCare. The result is that there are now many sick British Columbians being denied access to a prescription drug they desperately need, and which has shown to be one of the most effective treatments available. The reality is that British Columbians do not have access to a treatment that is readily available to most other Canadians," said Scott McDonald, Executive Director of the British Columbia Lung Association.

.....newswire



## **PULMONARY REHABILITATION: PATIENTS WIN, HEALTH CARE WINS, TAXPAYERS SAVE** *Pulmonary rehabilitation, along with advances in lung-disease pharmacology, provides a path to vastly improved quality of life.*

The elderly man was becoming short of breath with the least exertion and was no longer even able to walk out to the mail box. Unable to do all the things that made his life worth living, he visited his physician. After an examination and a few tests, he received the news—emphysema.

Forty years ago he would have been told, "There's not much we can do. Just take it easy, don't exert yourself, and we'll arrange for the oxygen when the time comes."

Today, the patient and his physician have other options. Pulmonary rehabilitation, along with advances in lung-disease pharmacology, provides a path to vastly improved quality of life, fewer hospitalizations, and savings to the health care system measured in billions of dollars.

The development of pulmonary rehabilitation can be traced in the scientific literature on lung disease. By 1969, pioneers such as Haas and Petty were publishing papers about the benefits of increased exercise and activity and of educating and training patients to deal with their diseases.

.....rtmagazine



## **"INSURED GO BROKE, STUDY SAYS"** *Think health insurance will protect you from bankruptcy? Think again.*

A Harvard study shows that half of all bankruptcies are

related to medical bills, and many of those filing for bankruptcy had insurance, at least at the start of their illness.

Some lost their coverage because they couldn't work, while others found they couldn't cover an accumulation of co-pays, deductibles and uncovered expenses, said Harvard professor Dr. Steffie Woolhandler, one of the study's main authors. - ``Even the best coverage can leave you vulnerable,`` she said. The study, appearing on the journal Health Affairs, shows that half of the 700,000 household bankruptcies in 2001 were the result of health bills.

Nearly two-thirds of the people in the study had health insurance, but one-third lost their coverage when they lost their jobs. ``It doesn't do you too much good to have employer-paid health insurance if you're too sick to work,`` Woolhandler said.

Of concern, she said, was that many families were bankrupted by medical expenses below the thresholds of increasingly popular high-deductible plans. Out-of-pocket expenses ranged on average from \$10,893 to \$18,500 depending on whether the patient had insurance.

In Massachusetts, of 17,734 bankruptcies, 9,929 were related to medical expenses.

.....Boston Herald..



## HEALTH TIP: FOR MANY, WINTER IS SAD TIME

Now that the holidays are long gone, many of us are experiencing cabin fever or the "winter blues."

But for people with a depressive condition called seasonal affective disorder (SAD), winter means much more than just the seasonal blahs.

An estimated 6 percent of Americans suffer from winter SAD, and another 10 percent to 20 percent may experience milder SAD symptoms. Winter's short days and long nights may induce feelings of depression, lethargy, fatigue, cravings for sweets and starches, headaches and sleep problems. The disorder usually begins when you're a young adult. It's also more common in women than in men.

What causes SAD is unclear, but it may have to do with the amount of sunlight you're exposed to. The following suggestions from the Mayo Clinic may help you better cope with this form of seasonal depression:

- Increase the amount of light in your home. Open blinds, add skylights and trim tree branches that block sunlight.
- Get outside. Walk outdoors on sunny days, even during winter.
- Exercise regularly. Physical exercise helps relieve stress and anxiety, which can accentuate SAD. Being more fit can make you feel better about yourself.
- Find ways to relax. Learn how to better manage stress.
- Take a trip. If possible, take winter vacations in sunny, warm climates.

.....HealthDay News



## CHOCOLATE RULES

Chocolate is beginning to be viewed as a healthy food in the medical industry. Chocolate was long seen as a medicinal product by the ancient people of South and Central America.

The flowers and beans were thought to be aphrodisiacs, as well as a treatment for various ailments, including indigestion and hemorrhoids. The chemical in chocolate, flavanol, is now believed to be more powerful than black tea or red wine in the creation of a heart-healthy diet.

Research by Naomi Fisher, M.D., director of hypertension services at Brigham and Women's Hospital in Boston, MA and Norman Hollenberg, M. D., Ph.D. , Professor of Medicine at Harvard Medical School, on a tribe of Kuna Indians who come from an island near Panama indicated an amazingly low level of hypertension. There also seemed to be no increase in blood pressure as the people aged. If people left the island, their excellent health seemed to deteriorate. The first hypothesis was that the Kuna did not have much salt in their diets, but just the reverse was true. What they did do was drink five or more cups of cocoa each day. The flavanol in the drink produced nitric oxide, which is important for keeping blood vessels open; it also helps reduce cholesterol problems and reduces the risk of blood clots.

The candy company Mars has invested in pro-chocolate research, and it is now selling a snack bar called CocoaVia on the internet. Their Chocolate Information Center is [www.chocolateinfo.com/index.jsp](http://www.chocolateinfo.com/index.jsp)

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## FDA TO CREATE NEW DRUG SAFETY BOARD

### *Independent panel will monitor medicines already on the market*

The Food and Drug Administration will establish a new independent Drug Safety Oversight Board to monitor FDA-approved medicines once they're on the market and update physicians and patients with emerging information on risks and benefits. House and Human Services Secretary Mike Leavitt announced the creation of the board during a meeting with FDA employees. The agency has been criticized sharply in recent months as reacting too slowly to reports linking the arthritis drug Vioxx and pain drug Celebrex to increased risks of heart attack and stroke. Leavitt said it's clear that people want more oversight and openness from the agency. "They want to know what we know, what we do with information and why we do it," he said, promising to create "a new culture of openness and enhanced independence."

The board will recommend what information and updates to put on the government's Drug Watch, resolve disputes over drug safety issues and oversee the development of a drug safety policy. It will be composed of FDA employees, medical experts from other HHS agencies and governmental departments, and consult with outside medical experts as well as consumer and patient groups, officials said. To improve new drug safety information reaching patients and doctors, the board will create a drug safety Web page with emerging information for both previously and newly improved drugs, such as side effects, safety risks and steps that can be taken to minimize them.

.....MSNBC



# Prosit!

# To Your Health!

## AFTER READING THIS, YOU'LL NEVER LOOK AT A BANANA IN THE SAME WAY AGAIN!

**Bananas:** Containing three natural sugars - sucrose, fructose and glucose combined with fiber, a banana gives an instant, sustained and substantial boost of energy. Research has proven that just two bananas provide enough energy for a strenuous 90-minute workout. No wonder the banana is the number one fruit with the world's leading athletes. But energy isn't the only way a banana can help us keep fit. It can also help overcome or prevent a substantial number of illnesses and conditions, making it a must to add to our daily diet.

**Depression:** According to a recent survey undertaken by MIND amongst people suffering from depression, many felt much better after eating a banana. This is because bananas contain tryptophan, a type of protein that the body converts into serotonin, known to make you relax, improve your mood and generally make you feel happier.

**Anemia:** High in iron, bananas can stimulate the production of hemoglobin in the blood and so helps in cases of anemia.

**Blood Pressure:** This unique tropical fruit is extremely high in potassium yet low in salt, making it the perfect way to beat blood pressure. So much so, the US Food and Drug Administration has just allowed the banana industry to make official claims for the fruit's ability to reduce the risk of blood pressure and stroke.

**Brain Power:** 200 students at a Twickenham (Middlesex) school were helped through their exams this year by eating bananas at breakfast, break, and lunch in a bid to boost their brain power. Research has shown that the potassium-packed fruit can assist learning by making pupils more alert.

**Constipation:** High in fiber, including bananas in the diet can help restore normal bowel action, helping to overcome the problem without resorting to laxatives.

**Hangovers:** One of the quickest ways of curing a hangover is to make a banana milkshake, sweetened with honey. The banana calms the stomach and, with the help of the honey, builds up depleted blood sugar levels, while the milk soothes and re-hydrates your system.

**Heartburn:** Bananas have a natural antacid effect in the body, so if you suffer from heartburn, try eating a banana for soothing relief.

**Mosquito bites:** Before reaching for the insect bite cream, try rubbing the affected area with the inside of a banana skin. Many people find it amazingly successful at reducing swelling and irritation.

**Nerves:** Bananas are high in B vitamins that help calm the nervous system.

**Overweight and at work?** Studies at the Institute of Psychology in Austria found pressure at work leads to gorging on comfort food like chocolate and crisps. Looking at 5,000 hospital patients, researchers found the most obese were more likely to be in high-pressure jobs. The report concluded that, to avoid panic-induced food cravings, we need to control our blood sugar levels by snacking on high carbohydrate foods every two hours to keep levels steady.

**Ulcers:** The banana is used as the dietary food against intestinal disorders because of its soft texture and smoothness. It is the only raw fruit that can be eaten without distress in over-chronicler cases. It also neutralizes over-acidity and reduces irritation by coating the lining of the stomach.

**Temperature control:** Many other cultures see bananas as a "cooling" fruit that can lower both the physical and emotional temperature of expectant mothers. In Thailand, for example, pregnant women eat bananas to ensure their baby is born with a cool temperature

**Seasonal Affective Disorder (SAD):** Bananas can help SAD sufferers because they contain the natural mood enhancer tryptophan

**Smoking:** Bananas can also help people trying to give up smoking. The B6, B12 they contain, as well as the potassium and magnesium found in them, help the body recover from the effects of nicotine withdrawal.

**Stress:** Potassium is a vital mineral, which helps normalize the heartbeat, sends oxygen to the brain and regulates your body's water balance. When we are stressed, our metabolic rate rises, thereby reducing our potassium levels. These can be rebalanced with the help of a high-potassium banana snack.

**Strokes:** According to research in "The New England Journal of Medicine," eating bananas as part of a regular diet can cut the risk of death by strokes by as much as 40%!

So, a banana really is a natural remedy for many ills. When you compare it to an apple, it has four times the protein, twice the carbohydrates, three times the phosphorus, five times the vitamin A and iron, and twice the other vitamins and minerals. It is also rich in potassium and is one of the best value foods around. So maybe its time to change that well-known phrase so that we say, "A banana a day keeps the doctor away!"

## EAT THIS FOR BREAKFAST. LOSE WEIGHT

Breakfast eaters are leaner than those who skip the morning meal. And lest you think you're too busy for a bite that early, note this: Missing breakfast is associated with a fourfold increase in the risk of obesity, according to the latest issue of the Harvard Men's Health Watch.

The best breakfast includes high-fiber cereal, nonfat milk, and fruit, such as bananas, berries, or apple slices. Why is that better than a bagel or bacon? It will not only help you lose weight, but also reduce the risk of heart disease, stroke, diabetes, and even intestinal polyps and colon cancer.

The centerpiece of this healthy breakfast is high-fiber cereal. Look for breakfast cereals that provide at least 6 grams of fiber per serving, suggests Harvard Men's Health Watch, but make sure your choice is low in sugar at less than 10 grams per serving.

Not convinced you should eat cereal for breakfast? A study from the University of Toronto also found that people, especially children, who frequently eat cold cereal for breakfast, are less likely to be overweight. Cereal-eaters not only have a lower body mass index than their non-cereal eating friends, but also have a higher intake of important nutrients, including vitamins A, B6, thiamin, riboflavin, niacin, folate, calcium, iron, and zinc.

Of course, you don't have to eat the same thing every day, but do make wise choices:

- Toast: Choose a whole grain or pumpernickel bread instead of white bread.
- Margarine: Opt for trans-fat-free soft margarines or cholesterol-lowering spreads that contain plant stanols.
- Eggs: You don't have to ban them from the breakfast table, but eat them sparingly. Here's an idea: Save them for a special brunch.
- Hash browns, bacon, croissants, and fast food: Skip them! They have too much fat or salt or both.

Experiment with the morning meal to find a combination of healthy breakfast foods that you enjoy eating.

....netscape



## FEEL-GOOD FOODS

### *New research shows some foods and beverages can improve your health as well as your diet*

Are you worried about high cholesterol? Try switching from sugary cereals to whole-grain varieties like Total or Puffed Kashi. Do you want to improve your night vision? Eat more blueberries. Depressed? Try eating more salmon, and you'll lower your risk of heart disease, too.

Over the past several years, researchers have identified a range of health benefits—from lower blood pressure to improved memory skills and mental acuity—linked with the consumption of certain foods and beverages. A new study to be published next week in the journal *Biological Psychiatry* indicates that some foods could even help fight depression. A

team of researchers at McLean Hospital, associated with Harvard University, found that omega-3 fatty acids and uridine, two substances that occur naturally in foods such as fish, walnuts, molasses and sugar beets, prevented the development of signs of depression in rats as effectively as antidepressant drugs. Another study published last month in the *American Journal of Clinical Nutrition* found that green tea, which has already been shown to help fight heart disease, cancer and other diseases, may also fight fat.

“There are new studies out all the time about new health benefits that foods provide,” says Dee Sandquist, a registered dietician and spokesperson for the American Dietetic Association. The ADA, which has reviewed scientific studies on everything from fatty fish to fermented dairy products, calls those with documented health benefits “functional foods.”

“They’re whole foods and fortified, enriched or enhanced foods,” says Sandquist. “Functional foods have evolved as food and nutrition science has advanced beyond the treatment of deficiencies to reducing the risk of disease.”

Several such foods fit into the federal government’s updated dietary guidelines, released last month, which put renewed emphasis on making healthy choices. The new guidelines boost the recommended servings of fruits and vegetables to four and a half per day, emphasize whole grains over other kinds of carbohydrates and encourage fat-free or low-fat dairy options. “Half your plate should be filled with fruits or vegetables; the other half should be evenly divided between whole grains and protein. Then add three servings of skim dairy products,” suggests Dr. Christine Gerbstadt, a registered dietician in Pittsburgh.

Which foods pack the most punch in those categories? NEWSWEEK spoke to some of the top nutrition experts and sorted through the latest studies to select foods and beverages that fit into those guidelines and provide a range of health benefits backed by strong scientific evidence. Here, in no particular order, are our top eight picks:

### **FATTY FISH**

The ADA rates the evidence as “strong to very strong” that fatty fish like salmon, which contains omega-3 fatty acids, helps lower the level of triglycerides—high-energy fatty acids that are associated with heart disease at high levels.

Scientists first suspected that fish could reduce the risk of heart disease back in the 1970s, after observing the low incidence of heart disease among natives of Greenland and the Japanese islanders on Okinawa, both communities with high seafood consumption. Consequent studies in the 1980s and 1990s offered more evidence that linked higher fish consumption with lower risks of heart disease.

In addition to cardiovascular disease, fish consumption has been shown to lower the risk for breast, prostate, colon and lung cancers as well as other chronic diseases like Alzheimer’s, asthma and arthritis.

***Tip: Scientists now estimate that Americans whose diets include a higher intake of fish, particularly those high in omega-3 fatty acids like salmon and tuna, reduce their risk of***

*heart disease by about 47 percent compared to those who don't eat fish, says Michael Murray, a naturopathic doctor and author of the forthcoming "Encyclopedia of Healing Foods."*

#### NUTS

Both almonds and walnuts have been shown to lower cholesterol. For example, a study published last fall in the journal *Metabolism* found that participants who followed a specific dietary plan high in heart-healthy foods, including almonds, decreased their LDL or "bad" cholesterol (since it can clog arteries) by 35 percent—in just two weeks. And a study published in 2002 in the journal *Circulation* found that participants who substituted a portion of almonds for their usual daily snacks reduced their LDL cholesterol by 9.4 percent and raised their HDL cholesterol (or "good" cholesterol, since it has been shown to protect against heart attacks) by 4.6 percent in four weeks.

Data from a Harvard Nurses' Health Study in 1998 showed that women who consumed more than five ounces of nuts a week lowered their risk of heart disease by 35 percent, compared with women who rarely ate nuts. And another study done at Harvard's School of Public Health, published in the *Archives of Internal Medicine* in 2002, found that men who ate nuts at least twice a week had a 47 percent lower risk of sudden cardiac death compared with men who rarely or never consumed nuts.

"Nuts are also the best source for arginine, an amino acid that plays an important role in wound healing, detoxification reactions, immune functions and promoting the secretion of several hormones, including insulin and growth hormone," says Murray.

**Tip: Nuts are high in calories and fat, so eat only a small portion (23 almonds make up a serving).**

#### WHOLE GRAINS

Research has shown that people who eat whole grains have lower body mass index, lower total cholesterol and lower waist-to-hip ratios. Various studies on a variety of different populations found that people who eat three daily servings of whole grains can reduce their risk of heart disease by 25 to 36 percent, stroke by 37 percent, type 2 diabetes by 21 to 27 percent, digestive system cancers by 21 to 43 percent, and hormone-related cancers by 10 to 40 percent, according to researchers at the Grain Institute at the University of Minnesota who reviewed various studies.

Why? In a study published in the December issue of *The American Journal of Clinical Nutrition*, Harvard researchers found that whole grains lowered the risk of coronary heart disease in men, and suggested that the bran component could be a key factor. Another study, published a month earlier, that followed more than 27,000 men over an eight-year period found that those who consumed the most whole grains in their diets gained less weight. Harvard researchers concluded that components in whole grains may alter a person's metabolism and reduce long-term weight gain. The ADA has also found "very strong" scientific evidence that beta-glucan in whole oat

products can reduce LDL cholesterol levels.

**Tip: "All foods labeled 'wheat' are not equal when it comes to fiber," says Sandquist. Look for products clearly marked "whole grain" that have three grams or more of fiber per serving (an average of 100 calories).**

#### APPLES

In an analysis of more than 85 studies, apple consumption was consistently shown to be associated with a reduced risk of heart disease, cancer, asthma and type 2 diabetes, compared to other fruits and vegetables, says Murray.

Researchers have traced much of the apple's protective benefit against heart disease and asthma to its high content of quercetin, a type of flavonoid (antioxidants known for their free radical-scavenging properties) that also has anti-inflammatory properties. Apples are also very high in pectin, a soluble fiber that has been shown to help lower cholesterol levels and to improve the intestinal muscle's ability to push waste through the gastrointestinal tract. In a study published this month in *Gut*, an international journal of Gastroenterology and Hepatology, Italian researchers also found that apple extracts prevented oxidative damage to gastrointestinal cells. They concluded that a diet rich in apple antioxidants might help prevent some gastric diseases.

Adding just one large apple to the daily diet has been shown to decrease serum cholesterol by eight to 11 percent, says Murray. Eating two large apples a day has lowered cholesterol levels by up to 16 percent. Both the insoluble fiber in apples and pectin also help promote bowel regularity, relieving both constipation and diarrhea.

**Tip: One medium unpeeled apple provides 3 grams of fiber, more than 10 percent of the recommended daily fiber intake. Even without its peel, a medium apple provides 2.7 grams of fiber.**

#### CRUCIFEROUS VEGETABLES

One of the American Cancer Society's key dietary recommendations for reducing the risk of cancer is to regularly include cruciferous vegetables, which include: cabbage, broccoli, Brussels sprouts, cauliflower and kale. "Brussel sprouts are like eating a vitamin pill. It's all nutrients," says Gerbstadt.

But all members of the so-called "cabbage family of vegetables" contain more phytochemicals with demonstrable anti-cancer properties than any other vegetable family, says Murray. Most of these compounds are glucosinolates, which break down in the body and fight the development of cancer in different ways.

Cabbage has also been shown to be extremely effective in the treatment of peptic ulcers. Dr. Garnett Cheney from Stanford University's School of Medicine and other researchers in the 1950s demonstrated that fresh cabbage juice showed a measurable effect in treating ulcers in less than a week. The anti-ulcer component of cabbage has been identified as the amino acid glutamine—a critical factor in the growth and regeneration of the cells that line the gastrointestinal tract, says Murray.

Studies by researchers at Tokyo Noko University concluded that cabbage is also good for keeping cholesterol levels low. And Chinese researchers found that the consumption of cabbage could protect against brain-tumor development.

**Tip: Most vegetables lose nutrients and flavor if they're stored for too long, so just buy a few days' worth of fresh vegetables at a time.**

### LEGUMES

Small red beans, a pea-sized legume often used in recipes for Mexican food, were found to have the highest antioxidant levels among 100 different types of fruits, vegetables, berries, nuts and spices tested last year by Ronald L. Prior, a USDA nutritionist and research chemist based in Little Rock, and his colleagues. Antioxidants reduce damage from oxygen, like that caused by free radicals, and may reduce the risk of cancer.

Diets rich in legumes—which include several varieties of beans (kidney, black, lima, pinto and garbanzo), peas (yellow and split green, though not garden) and lentils—are also known to lower cholesterol levels and improve blood glucose control in diabetics. Legumes contain many important nutrients and phytochemicals, and when combined with grains, they form a complete protein, says Murray. They provide at least 20 percent of the USDA daily recommended doses of iron, magnesium and folate, and are also a good source of complex carbohydrates, fiber and B vitamins.

**Tip: One-half cup of cooked legumes provides the same protein as one ounce of meat.**

### BLUEBERRIES

Like legumes, blueberries have consistently demonstrated antioxidant effects (they're the second-most antioxidant-rich food, according to the U.S. Department of Agriculture). Researchers have found that blueberries help protect the brain from oxidative stress and may reduce the effects of age-related conditions, such as Alzheimer's disease.

Some studies also indicate that blueberries might help improve night vision and prevent macular degeneration and cataracts. After British pilots touted the vision-improving benefits of blueberries in World War II, researchers studying blueberry extracts found that they do improve nighttime visual acuity, and lead to quicker adjustment to darkness and faster restoration of visual acuity after exposure to glare, says Murray. Clinical studies have shown good results in individuals with sensitivity to bright lights, diabetic retinopathy and macular degeneration. Additional research points out that blueberries may be protective against the development of cataracts and glaucoma, and used in the treatment of varicose veins, hemorrhoids and peptic ulcers.

In addition to soluble and insoluble fiber, blueberries contain tannins, which act as astringents in the digestive system to firm up a loose stool. They also contain the same compounds found in cranberries that help prevent or eliminate urinary tract infections.

**Tip: Blueberries are a traditionally popular remedy for both diarrhea and constipation.**

### TEA

Both green and, to a lesser extent, black tea, contain catechins, phytochemical compounds that have natural antibiotic, antidiarrhea and antioxidant capabilities. Researchers have linked the so-called "tea flavonoids" to the prevention of cancer and heart disease. Newer studies have shown that green tea may help increase fat loss and physical stamina, and prevent Alzheimer's disease.

In a study published last month in the American Journal of Clinical Nutrition, Japanese researchers found that people who drank a bottle of tea fortified with green tea extract every day for three months lost more body fat than those who drank a bottle of regular oolong (black) tea. Japanese researchers studying the effects of green tea extract on mice found that it significantly improves endurance and athletic performance.

In a study published last fall in the academic journal Phytotherapy Research, British researchers found that both green and black tea hinder the activity of two enzymes in the brain associated with Alzheimer's disease and suggest that drinking tea can improve your memory. And a study by Indian researchers that appears in the current issue Pharmaceutical Research found a variety of black tea was effective in reducing inflammation.

**Tip: Green tea is the least processed so it provides the most antioxidant phytochemicals.**

.....Newsweek



### TRIMMING WITH TEA

Here's a new diet drink to help people shed pounds: oolong tea enriched with some of the antioxidant compounds that naturally occur in green tea. Men who drank this hybrid brew during a 3-month study in Japan lost 1.1 more kilograms in weight than did men drinking conventional oolong tea—with no other difference in their respective diets or exercise.

The hybrid tea also offered a second benefit: reduced development of oxidized fatty materials in the bloodstream, such as low-density-lipoprotein (LDL) cholesterol, the bad cholesterol. Oxidized fats, especially LDL cholesterol, have been linked to the formation of artery-clogging plaque and heart attacks.

Indeed, Tomonori Nagao and his collaborators conclude, these results suggest a possible role for the chemical process of oxidation in the accumulation of body fat.

#### Why green tea?

This is not the first study to suggest a slimming effect of green tea. Five years ago, European scientists reported that 10 men in one study burned more calories on a day during which they took two capsules containing epigallocatechin gallate (EGCG), a compound that develops in most brewed teas and especially in green tea.

**GO ON GREEN.** Green tea is richer than other brews in catechins, so it's used to make a fortified brew being tested in dietary studies.

The amount of extra energy burned on the day when the

EGCG capsules were consumed was small, only 80 calories. Moreover, the test lasted a mere 3 days: One when the recruits got caffeine, another when they received the amount of EGCG typically present in 2 to 3 cups of green tea, and a day when they downed placebo capsules. Still, the findings were an important spur to the health-foods industry to deliver green tea extract or EGCG itself to weight-conscious consumers.

Bolstering the enthusiasm for green-tea components as a diet booster was work done by scientists at the world's largest agricultural-science facility, the federal government's Beltsville (Md.) Agricultural Research Center. There, a study in 12 men indicated that some component of tea other than caffeine prompted the body to use fat to fuel its energy needs. Each volunteer burned about 12 percent more fat on days when he drank full-strength oolong tea than on days he drank caffeine-laced water.

The green-tea agents suspected of boosting an individual's calorie-burning rate, or metabolism, are catechins, chemicals in the flavonoid family. Many dietary flavonoids, such as the anthocyanins in berries, have turned out to be potent antioxidants. Catechins tend to be found in woody plants, such as *Camellia sinensis*, the shrub whose leaves are used to make true teas—as opposed to herbal teas (see *Another Green That Might Prevent Breast Cancer*). Which catechins predominate in any given tea depends on how the plant's leaves were processed—for green, oolong, or black tea (see *A Brew for Teeth—And the Rest of You*).

#### **The experimental brew**

For their new trial, Nagao and his colleagues at Kao Corp. in Tokyo decided to investigate whether catechins' apparent calorie-burning benefit in green teas could be maintained for several months. So, the scientists recruited 38 company employees to drink tea as prescribed and have their weight monitored.

**TEA TIME.** Even before a long-term human trial confirmed the weight-reducing attributes of tea catechins, Kao Corp. began marketing this heavily fortified diet aid—with the Japanese government's approval.

All received a 340-milliliter bottle (roughly two teacups worth) of oolong tea, which is Japan's favorite, to drink with dinner each day. Half of the men got oolong laced with some 22 milligrams of green-tea catechins. The rest drank tea spiked with 690 mg of the catechins. A typical serving of green tea can contain anywhere from 20 to 50 mg of catechins, depending on the brand and how it was brewed, Nagao says. The recipes of both experimental teas were adjusted to deliver identical concentrations of caffeine. Until the trial was completed, neither the participants nor the overseeing scientists knew which brew a recruit had been assigned to receive.

Because none of the recruits was slim, the researchers computed how many daily calories were needed to maintain each participant's weight and then assigned each man to eat 10 percent fewer calories than that. So, all men who followed the dietary guidance should have lost some weight during the

12-week trial. On workdays, the men ate meals individually prepared for them and served in the company cafeteria. When they had to eat at home—principally on holidays and weekends—the recruits were told to adhere to eating tips that would roughly match the cafeteria dining. All food consumption was recorded. Throughout the trial, caffeinated and catechin-rich foods other than the teas were limited.

#### **Big fat target**

In the January *American Journal of Clinical Nutrition*, Nagao's team reports that both groups of men lost weight—roughly 1.3 kilograms for those drinking the low-catechins tea and 2.4 kg for those on the brew heavily spiked with catechins.

More importantly, much of the weight loss in the latter group came from fat. Compared with measurements of the men before the trial began, total fat volume fell 10.3 percent in the average high-catechin-tea drinker but just 2.6 percent in the others. Further analysis showed that roughly equal proportions of subcutaneous fat (stored in pads under the skin) and visceral fat (the marbling within muscle and internal padding deep within the trunk) disappeared in both groups. That's good because although paring subcutaneous fat leads to a slimmer physique, losing visceral fat is better for a person's health. Visceral fat poses a greater risk of heart disease and diabetes.

Visceral fat also contributes to a bigger belly, and not surprisingly, both groups found their belts loosening during the trial. The low-catechin tea drinkers shaved 1.6 centimeters off their waistlines while the high-catechin group trimmed off more than twice that much.

Similar advantages from the high-catechin tea emerged in the researchers' analysis of fatty particles in the men's blood. For instance, while concentrations of triglycerides—which increase a person's risk of heart disease—increased a little more than 2 percent in the low-catechin group, they remained unchanged in the high-catechin-tea drinkers. And although cholesterol concentrations increased in both groups of men, it climbed 6.3 percent in the low-catechin group but only 3.4 percent in the others. Moreover, concentrations of dangerous LDL cholesterol and oxidized-LDL cholesterol dropped in both groups, but more than three times as much—11.5 percent and 36.3 percent, respectively—in the men who drank the high-catechin brews.

The oxidized LDL changes were particularly encouraging, the researchers note, citing studies indicating "that an increase in plasma [oxidized]-LDL can be used as a marker of unstable atherosclerotic cardiovascular disease." Nagao says his company is now moving toward longer-term and larger trials of tea drinking among men and women.

In the meantime, if adherence to a New Year's resolution to drop the pounds is waning—as it does in most people by the end of January—then maybe it's time to consider switching one's caffeinated pick-me-up to green tea.

Consumers in Japan have an additional specially-fortified choice: a Kao Corp. green tea that packs 540 mg of these chemicals into each 350 ml bottle. Indeed, the Japanese

government has approved a product-labeling claim for this nutraceutical, or food with potential health benefits (see *The Rise of Nutraceuticals*). It reads: "Due to its high content of tea catechin, this green tea is suitable for people concerned about body fat."



### THE PROOF IS IN THE . . . YOGURT?

The calendar says it's still midwinter, but the Yoplait TV commercials are already looking ahead to summer: They suggest that eating three servings a day of Yoplait Lite yogurt may help that "itsy bitsy, teeny weeny, yellow polka dot bikini" fit better this year.

#### So can dairy products really help to control weight?

A number of scientists, including some on the 2005 U.S. Dietary Guidelines Scientific Committee, have been mulling that very question in recent years.

"There's a large body of epidemiological data which is very consistent and shows that people with a high dairy intake tend to weigh less and are at less risk of being obese," said Robert P. Heaney, professor of medicine at Creighton University in Omaha. "That's always promising, but it's not proof."

A few randomized, controlled studies observing individuals' responses to dairy in the diet also point to weight-loss benefits. Most of the studies are small and brief. But in general they found that people who cut about 500 calories daily from their intake and ate about three servings of dairy products per day lost more weight and trunk fat than did those who cut the same number of calories but ate less dairy food. (Researchers made sure that daily calories burned were similar for both groups.)

One 26-week study by Michael B. Zemel, director of the University of Tennessee's Nutrition Institute in Knoxville, found that dieters who ate three servings of dairy lost about twice the amount of body weight as those who skimmed on dairy. Zemel, who has received funding from the Dairy Council and Yoplait, has patented his institute's findings about using dairy products for weight control. (General Mills, maker of Yoplait, had to obtain a license from the university's research foundation to cite Zemel's findings.)

So how might milk and other dairy products work to help control weight? Scientists still haven't nailed that one down. But they do know that eating too little dairy increases the body's production of a type of vitamin D known as calcitriol, but it also signals fat cells to store more fat, "so you get bigger, fatter fat cells and have more of them," Zemel said. High-dairy diets have the opposite effect, he said, producing "smaller, leaner fat cells."

Still, the evidence failed to convince the dietary guidelines scientific committee to add weight loss to the list of proven benefits of dairy consumption in its report issued in August. "The amount of publicity that this [weight loss claim] is getting is widely disproportionate to the evidence base," notes Carlos Camargo, associate professor of epidemiology at the

Harvard School of Public Health and member of the guidelines committee. "If it's true, great. But somebody needs to demonstrate that in a more traditional fashion."

#### In the meantime, here's what experts advise:

Don't expect miracles. Before you head for the dairy case seeking a weight-loss booster, know this: "Whatever I can say about dairy or anything else for weight loss doesn't obviate the obvious," Zemel said. "There's no giant eraser for calories. . . . People often say to me, 'I eat a lot of dairy and I'm still fat.' That's because calories still count." Plus, the weight-loss effects of dairy seem to occur only if you also cut calories.

Aim for three servings of dairy products daily. That's the number recommended by the U.S. Dietary Guidelines for those who eat 1,600 or more calories daily. (For those who eat less than 1,600 calories, the guidelines suggest two servings.) A serving is an eight-ounce glass of milk, a cup of yogurt or about an ounce of cheese. There are a number of dairy products available for people with lactose intolerance.

Calcium supplements and calcium-fortified food aren't the same as dairy products. Researchers have found that people who took calcium carbonate dietary supplements lost more weight than people on a low-dairy diet -- but not as much as those on a high-dairy eating plan, Heaney said. "So there seems to be something more to it than just increased calcium," he said. "That's why I stress dairy [foods] and not calcium supplements."

Make your dairy foods nonfat or low-fat. The National Center for Health Statistics reports that adults gain about one to 1 1/2 pounds per year from ages 20 to 40. "So these should be low-fat or nonfat dairy products," said Xavier Pi-Sunyer, director of the New York Obesity Research Center at St. Luke's-Roosevelt Hospital. Prevention of weight gain, Pi-Sunyer said, "is necessary for nearly every American." Whole milk has 150 calories per eight-ounce glass -- 70 more per glass than skim. Drink milk three times daily for a year and that could work out to a 22-pound difference. •

....The Washington Post



### TIPS

- Fill up on nutritious plant foods such as vegetables, fruits, whole grains, peanuts and nuts.
- Use peanut butter on your waffles or toast instead of butter, and sprinkle seasoned peanuts on salads instead of cheese.
- Use olive oil, canola, or peanut-oil based dressings on your salads.



### BAKED TORTILLA CHIPS

Cut 1 Soft flour Tortilla in half, then cut each half in half, and continue until you have sixteen Wedges.

Place Wedges on an ungreased cookie sheet and bake in a preheated oven at 400 degrees for 4-6 minutes.

Keep an eye on them! Chips are done when the thickest part of the tortilla Wedge is crisp to the touch.

**SOUTHWEST GRILLED POTATOES**

These spiced potatoes are so delicious, everyone will beg for more.

Yield: 4 servings

Preparation time: 25 min.

Cook time: 45 min.

**Ingredients**

- 1-1/2 pounds of small new red potatoes, unpeeled and well-scrubbed, cut in half if large
- 1/4 teaspoon of salt (optional)
- 1 tablespoon of olive oil
- 1 tablespoon of chili powder
- 1 tablespoon of freshly grated parmesan cheese
- 2 teaspoons of cilantro pesto (may substitute basil pesto)
- 1/4 teaspoon of freshly ground black pepper

**Method**

Light the grill.

Fill a large pot 3/4 full with water and bring to a boil over high heat. Add the potatoes and salt, and cook for 10 minutes. Drain well in a colander and set aside to cool.

In a large bowl, combine oil and chili powder, and toss potatoes. Place potatoes on hot grill, turning occasionally until browned on all sides.

In a separate mixing bowl, toss browned potatoes with parmesan cheese, pesto and fresh pepper. Serve.

**Nutritional Information**

Calories: 178

Calories from Fat: 25%

Total Fat: 5g

Saturated Fat: <1g

Cholesterol: 2mg

Sodium: 66mg

Carbohydrate: 28g

Protein: 5g

Fiber: 3g

Exchanges: 2 Carbs & 1 Fat

.....Diabetes Life

**ITALIAN BEAN AND TOMATO SALAD (HEALTHY LIVING)**

Prep Time: 15 min

Total Time: 1 hr 15 min

Makes: 6 servings, 1 cup each

**Ingredients**

- 2 cans (15 oz. each) white beans, drained, rinsed
- 2 cups cut fresh green beans (1-in. pieces)
- 2 cups chopped plum tomatoes
- 1/2 cup Kraft Light Done Right! House Italian Reduced Fat Dressing



- 2 Tbsp. chopped fresh fresh basil
- 2 Tbsp. Kraft 100% Grated Parmesan Cheese

**COMBINE** beans, tomatoes and dressing; cover.

**REFRIGERATE** at least 1 hour.

**SPRINKLE** with basil and cheese just before serving.

**NUTRITION (PER SERVING):** CALORIES 200, FAT 4.5 g (SAT 1 g), CHOL 5 mg, SODIUM 200 mg, CARB 31 g, FIBER 8 g, SUGARS 4 g, PROTEIN 12 g, DV VIT A 15%, DV VIT C 30%, DV CALCIUM 15%, DV IRON 25%

**Special Extra** Season to taste with freshly ground black pepper.

**Great Substitute** Substitute 2 cups steamed cut fresh asparagus for the fresh green beans.

**Nutrition Bonus**

Enjoy the flavors of summer in this easy no-cook salad recipe. The white and green beans provide a good source of fiber and iron, while the tomatoes and green beans team up to provide vitamin C.

**FRESH VEGETABLE SAUTE (HEALTHY LIVING)**

Prep Time: 15 min

Total Time: 25 min

Makes: 8 servings

**Ingredients**

- 2 Tbsp. olive oil
- 1-1/2 cups each: broccoli and cauliflower florets
- 1 cup diagonally sliced carrots
- 3/4 cup each: snow peas and sliced yellow squash
- 1/2 cup each: sliced mushrooms, red pepper strips and onion wedges
- 1/4 cup red wine vinegar
- 1 envelope Good Seasons Italian Salad Dressing & Recipe Mix

**HEAT** oil in large skillet on medium-high heat. Add vegetables; cook and stir until crisp-tender.

**STIR** in vinegar and salad dressing mix; cook until heated through, stirring occasionally.

**NUTRITION (PER SERVING):** CALORIES 70, FAT 3.5 g (SAT 0.5 g), CHOL 0 mg, SODIUM 360 mg, CARB 9 g, FIBER 3 g, SUGARS 5 g, PROTEIN 2 g, DV VIT A 90%, DV VIT C 60%, DV CALCIUM 2%, DV IRON 4%

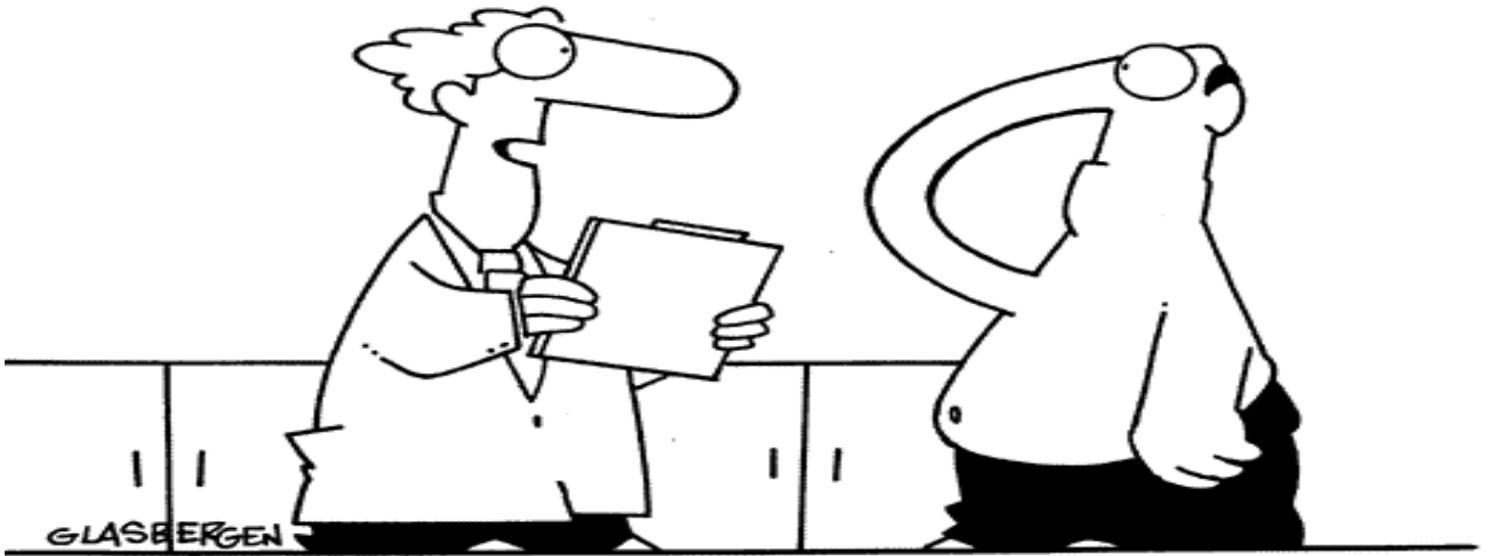
**Nutrition Bonus**

This naturally cholesterol free recipe is low in saturated fat and provides fiber. It's also an excellent source of vitamins A & C.

**Great Substitute**

Prepare as directed, using 7 cups of any combination of your favorite cut-up vegetables.





**“It’s an experimental procedure. Every time you blow your nose, you’ll clear out your arteries!”**

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