

EFFORTS

Emphysema Foundation For Our Right To Survive



Emphysema Takes Your Breath Away

May 2005

NOVARTIS AGREES TO DEVELOP AND COMMERCIALIZE NEW TREATMENT FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Novartis announced that it has signed a global development and commercialization agreement with Vectura Group plc and Arakis Ltd. for AD 237, an inhaled, long-acting, anti-muscarinic agent for the treatment of chronic obstructive pulmonary disease (COPD).

Novartis will be responsible for further development of AD 237 both as monotherapy and in combination with QAB149, its once-daily, long-acting beta2 agonist currently in Phase II clinical development.

Developed to date through a joint venture between Arakis and Vectura, AD 237 is a once-daily, long-acting muscarinic antagonist (LAMA) with a fast onset of action. The compound is in Phase II trials for the treatment of COPD and studies have thus far demonstrated that it is well-tolerated and effective over 24 hours after a single dose. AD 237 has been developed using Vectura's proprietary PowderHale® inhalation technology for delivering product to the lung and optimizing fine particle fraction delivery through a commercially available dry-powder inhaler device.

"With this agreement, our late stage pipeline now contains two promising bronchodilator drugs, QAB149 and AD 237 for the treatment of COPD," said Joerg Reinhardt, Head of Development, Novartis Pharma AG. "Both products have significant therapeutic potential, either as single agents or combination therapies. Respiratory disease is one of our key therapeutic areas of focus, and we are delighted to expand our franchise and provide patients with important new therapeutic solutions."

COPD, the world's fourth largest cause of death, is an irreversible and chronic obstruction of the airways which is caused primarily by smoking. It is estimated that the disease is prevalent in 4% of the population in the USA, Europe and Japan, and that at least one in 15 smokers suffers from it. Symptoms include chronic bronchitis and emphysema or both conditions, which slowly progress and eventually lead to a largely irreversible loss of lung function. The current market for COPD drug therapy is estimated to be worth \$4 billion per annum and is predicted to grow to \$10 billion by 2010.

Under the terms of the agreement Arakis and Vectura will receive an initial payment and additional milestone payments based upon the achievement of agreed clinical, regulatory and commercialisation targets. In addition, royalties on product sales will be paid for both the monotherapy and combination

products. All payments by Novartis will be shared equally by Arakis and Vectura.

The foregoing press release contains forward-looking statements that can be identified by the use of forward-looking terminology such as "will", "promising", "potential", "is estimated", "is predicted", or similar expressions, or by express or implied discussions regarding the potential development and commercialization of AD 237 and QAB149. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantee that the agreement that is the subject of this release will lead to commercialization of AD 237 or QAB149 in any market. Any such commercialization can be affected by, among other things, uncertainties relating to product development and clinical trials; regulatory actions or delays or government regulation generally; the ability to obtain or maintain patent or other proprietary intellectual property protection and competition in general; government, industry, and general public pricing pressures; as well as factors discussed in the Company's Form 20-F filed with the Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. Novartis is providing this information as of this date and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

.....Novartis



NEW TECHNIQUES SAFELY REMOVE DEEP VEIN CLOTS

New techniques that aid in dissolving and removing blood clots in the legs could improve treatment for this painful and often dangerous condition, researchers report.

Deep vein thrombosis (DVT) affects approximately 250,000 people annually, and about half of them go on to suffer from chronic leg pain and swelling, called post-thrombotic syndrome, said Dr. Suresh Vedantham, assistant professor of radiology and surgery at Washington University, in St. Louis.

The condition has received considerable media attention in the past few years after striking passengers on long-distance flights. Many airlines now advocate that passengers do simple

exercises during flights to maintain healthy circulation in the legs.

The most common DVT treatment -- a blood-thinner medication that prevents new clots but does not remove the existing clot -- could be improved upon, Vedantham said. "It's been sort of recognized that removing the clot is a better treatment than blood thinner, but the previous treatments to do this are not user-friendly," he said.

The traditional clot-removing treatment, called catheter-directed thrombolysis, involves an infusion of anti-clotting medication that takes as long as two days to break down the clot. The procedure also requires careful monitoring, with a follow-up in a hospital's intensive care unit. Less than 5 percent of individuals with deep vein clots undergo the procedure, Vedantham said.

"The holy grail for us has been, 'Can you remove the clot in one step,' and these [new] techniques may turn out to be what we've been seeking for a long time," he said.

Vedantham presented research on three of these new technologies on Friday at the Society of Interventional Radiology's annual scientific meeting in New Orleans.

The first, called the Power Pulse Spray, delivers clot-dissolving medicine at a high force which helps break up DVT by spreading the drug over a surface area of the clot. Thirty minutes later -- when the clot begins to partially dissolve -- the spray is used to create a vacuum so the clot can be sucked into a catheter and removed.

In studies of the device, 80 percent of 14 patients who tried the technique were treated in a single session, and in 10 cases (71 percent), the clot was completely removed. Three of the patients had a substantial removal of their clots while one achieved only a partial removal.

A second method, called The Trellis(r)-8 Infusion System, first isolates the clot by surrounding it with inflated balloons to minimize bleeding. Doctors then insert a thin vibrating wire filament into the blockage, effectively chewing up the clot. The clot fragments are then pulled into a catheter and removed from the body.

A study compared the Trellis technique to the traditional catheter-directed thrombolysis. The researchers report that patients who underwent the vibrating wire treatment experienced a lower risk of bleeding and required lower doses of clot-dissolving medication. The procedure also took less time, saving hospital costs.

Vedantham also reported on a third technique, the HELIX Clot Buster, a device that works by chewing up the clot. Unlike the other two devices, HELIX is not yet approved by the FDA for use in DVT, although it is FDA-approved for clots related to dialysis, the researchers said.

In an eight-year study involving 36 patients -- 11 of whom had the traditional method of clot removal, and 25 of whom were treated with the HELIX -- researchers found no difference in the overall 86 percent success rate of the two therapies in removing the clots.

In the HELIX group, however, treatment time was significantly shorter and the dose of anti-clotting medicine required was half that of traditional interventions. There was

also a trend toward fewer bleeding events, the researchers found.

"This techniques will be a major sea change in the way DVT will be treated," Vedantham said.

But Dr. Samuel Z. Goldhaber, director of the Venous Thromboembolism Research Group at Brigham and Women's Hospital, in Boston, stressed that these techniques, no matter how promising, are still invasive procedures only used for patients at "the most severe end of the spectrum."

"Rigorous clinical trials are needed to determine how broadly applicable these techniques should be," he said. th Annual Scientific Meeting, New Orleans

.....ScoutNews



INTERLEUKIN-12 MAY PROTECT AGAINST LETHAL RESPIRATORY INFECTION

Treatment with interleukin-12 may protect against tularemia in humans, say researchers from Albany Medical College in New York. Their findings appear in the April 2005 issue of the journal *Infection and Immunity*.

Tularemia, caused by the bacterium *Francisella tularensis*, is an extremely virulent respiratory disease with a mortality rate as high as thirty-five percent. Transmitted through insect bites, infected carcasses, contaminated drinking water and aerosols, this disease has raised concerns as a potentially dangerous biological weapon.

In the study mice were inoculated with interleukin-12 (IL-12) and challenged twenty-four hours later with a lethal dose of *F. tularensis*. Researchers determined that treatment with IL-12 prior to infection greatly reduced the amount of bacteria in the lungs, livers and spleens ultimately resulting in survival.

"These results demonstrate the ability of exogenous IL-12 to induce protective immunity against this bacterial threat in the respiratory tract," say the researchers.

.....American Society for Microbiology



EPA ENACTS LONG-AWAITED RULE TO IMPROVE AIR QUALITY, HEALTH

The Environmental Protection Agency enacted a broad new rule yesterday aimed at significantly reducing levels of health-damaging ozone and atmospheric soot caused by emissions from power plants in eastern and Midwestern states. The long-awaited Clean Air Interstate Rule (CAIR) -- viewed as the most substantial tightening of air quality standards since the

Clean Air Act was last amended in 1990 -- is expected to save thousands of lives each year and prevent the loss of millions of workdays missed annually because of pollution-related heart attacks, asthma and other health problems. The rule, to be phased in over the next decade, sets limits for the release of sulfur dioxide and nitrogen oxides from power-plant smokestacks in 28 states and the District. To meet the goals, many plants will have to install new scrubbers and other emissions-capturing equipment. Plants that cannot meet their deadlines will be allowed to buy credits from those that are

ahead of schedule -- an approach that the industry and environmentalists alike had sought as a way to achieve cost-effective regional reductions."The action we are taking will require all 28 states to be good neighbors, helping states downwind by controlling airborne emissions at their source," said EPA Acting Administrator Stephen L. Johnson, whom President Bush has nominated to head the agency. The District and its surroundings are among the dirtier regions of the country, but 70 percent of the pollution on the worst summer days arrives from coal-fired power plants and heavy industry farther west. The new rule is expected to produce gradual improvement, but meeting the new standards will be difficult without further measures, including reducing pollution from vehicles, officials have said. Nitrogen oxides react with sunlight in warm air to make ground-level ozone, also known as smog, which causes respiratory problems and damages crops. Sulfur dioxide makes acid rain, which has been wreaking environmental havoc in the East for many years. Both pollutants are key contributors to fine particulate soot, which causes a variety of respiratory ailments and contributes to the haze that has increasingly marred views in some of the nation's most pristine areas. Under the rule, sulfur dioxide pollution is expected to decline by 73 percent over the next decade, compared with 2003 levels, EPA officials said. Oxides of nitrogen are expected to drop by 61 percent. All told, the EPA calculated, the rule will prevent 17,000 premature deaths; 1.7 million lost workdays; 500,000 lost school days; 22,000 non-fatal heart attacks; and 12,300 hospital admissions annually by 2015. Yesterday's action ends years of efforts to deal with the fact that many eastern states have been unable to meet Clean Air Act standards because of emissions from power plants located in states upwind. The EPA determined last year that 160 million people in 450 counties in 32 states were living in areas that were out of compliance for airborne particulates and smog. Officials have said they will release a rule next week restricting mercury, the other major power plant pollutant. That rule is considered to be far more controversial and likely to be challenged in court. The CAIR and mercury rules, which had been languishing at the EPA, rose to sudden prominence Wednesday when a congressional committee did not advance the Bush administration's "Clear Skies" initiative. The legislation -- which Bush had argued was superior to yesterday's administrative action, in part because it was less likely to get hung up in a tangle of lawsuits -- was widely disparaged by environmental groups as a fundamental weakening of the Clean Air Act. By contrast, several environmental groups applauded CAIR. "EPA's action is a big breath of fresh air for the millions of Americans across the eastern U.S. suffering from unhealthy particulate and smog pollution," said Fred Krupp, president of Environmental Defense. While industry representatives grumbled that they would have preferred the president's bill, several expressed general support for CAIR, which grants them more time to cut emissions than many environmentalists had demanded. "CAIR should help clarify and streamline a contradictory and overlapping mess of existing

regulations that plague industry and regulators," said Bryan Brendle, director of air quality for the National Association of Manufacturers. "Business planners need such certainty, and flexibility, when considering investments in technological upgrades that further clean our air, improve efficiency and boost economic growth."Some environmental groups warned, however, that Americans may not realize the full benefits of the rule until 2022 because the cap-and-trade program allows utilities to bank pollution credits. The federal government's acid rain program -- which has used a cap-and-trade program to cut sulfur dioxide emissions for the past 15 years -- will not meet its 2000 emission targets until 2008, said John Stanton, senior counsel at the advocacy group Clear the Air, who called CAIR "too little, too late."Even without that complication, the EPA predicts that several major municipalities -- including Washington -- are unlikely to achieve compliance with the Clean Air Act by the time the rule takes full effect in 2015."Many states will need additional cleanup to protect their citizens," said Frank O'Donnell of Clean Air Watch. Agency officials have calculated that the benefits of CAIR will outweigh the costs to industry and consumers by as much as 25 to 1. According to the EPA, the rule could save \$100 billion a year in health costs and \$2 billion in yearly "visibility benefits," including improved views at national parks. The agency has estimated the cost to industry at \$4 billion a year. The agency has also said the new rule is not expected to increase retail electricity prices or homeowner utility bills noticeably until at least 2020.

.....Washington Post



MEDS FOR BREATHING PROBLEMS CAN RAISE HEART RISKS

Of the various drugs that are used to treat respiratory diseases such as asthma, oral steroids and theophylline that are most likely to cause an irregular heart rhythm, Spanish and US researchers report.

Numerous reports have linked respiratory medications with rhythm disorders, but data from broad-based studies is lacking, Dr. Consuelo Huerta, from Centro Espanol de Investigacion Farmacoepidemiologica in Madrid, and colleagues note in the medical journal *Epidemiology*.

To investigate this topic further, the researchers assessed respiratory drug use by 710 patients who experienced a heart rhythm irregularity and compared them with 5000 matched 'controls.'

Inhaled steroid use had no effect on the risk of rhythm disorders, the researchers found. By contrast, an elevated risk was seen with oral steroid use and, to a lesser extent, short-term theophylline use.

Oral steroids were linked to several types of heart rhythm irregularity, and the team says it's the first time this has been reported, as far as they know.

.....Epidemiology



The Merck Prescription Discount Program, to be launched April 25, will provide ALL UNINSURED

AMERICANS, REGARDLESS OF AGE OR INCOME, with easy and immediate access to discounts of 15 to 40 percent off many Merck medicines.

<http://merckhelps.com/uninsured/> is the official web site. Interesting concept; 2 ways to save: (A) Print a certificate online, present it to the participating pharmacist of your choice and get 10% off any of the covered products. (B) Enroll into the program beginning April 25 for discounts as high as 40% on selected medicines.

You can enroll online, by telephone or by snail-mail.

Popular Merck medicines such as Zocor, Cozaar, Hyzaar, Fosamax, Singulair, Proscar, and others are included in the program.

.....Merck



STUDY: VITAMIN D HELPS FIGHT LUNG CANCER

Getting enough vitamin D may be a matter of life or death. A provocative new study suggests it plays an important role in surviving lung cancer.

People can get the nutrient from their food, vitamin pills or being out in the sunshine. Researchers found that the lung cancer patients with high intake who had surgery during the summer were more than twice as likely to be alive five years later than those with low levels who had operations in winter.

It is one of several recent studies to show the benefits of the "sunshine vitamin" against cancer.

"There are a lot of data emerging from various areas suggesting it is important," said Dr. Edward Giovannucci, professor of nutrition and epidemiology at the Harvard School of Public Health.

He helped conduct what is believed to be the first human study to look at vitamin D and lung cancer survival. The results were reported Tuesday at an American Association for Cancer Research conference in Anaheim.

"This is a very interesting study. It's a new trend - looking at dietary factors as they relate to survival," not just the risk of getting a certain cancer, said Dr. Michael Thun, chief epidemiologist at the American Cancer Society, who had no role in the research.

Vitamin D is made by the skin from sunlight. Getting enough from diet alone is tough - fish and fortified milk are the main sources. Supplements are controversial because too much D can cause medical problems, but many scientists think the recommended daily level of 400 international units is too low.

The nutrient has many features that could explain its possible benefit against cancer, such as stifling cell growth. Doctors had seen evidence suggesting it prevents some cancers, and wanted to know if it also affected survival.

Led by Harvard University's Dr. David Christiani, they studied 456 consecutive patients with early-stage lung cancer at Massachusetts General Hospital, Brigham and Women's Hospital and Dana-Farber Cancer Institute. Patients were interviewed about diet, supplements and timing of their cancer surgery, which was thought to be another indicator of their vitamin D levels.

Those who had high vitamin D levels and summer operations fared the best: five-year survival was 72 percent

versus 29 percent for those who had the lowest levels of the nutrient and winter surgery.

This does not mean that people should delay or try to time operations, but taking vitamin D supplements around the time of surgery might be a good idea, said Wei Zhou, a Harvard researcher who presented the study results.

If verified by larger experiments, "this would be considered an important gain," said Thun of the cancer society. "A benefit of this size is important for this highly lethal disease."

Lung cancer is the world's top cancer killer. About 172,500 new cases and 163,510 deaths are expected this year in the United States, and more than 1.3 million cases and nearly 1.2 million deaths worldwide.

.....Associated Press



COPD STUDY WILL FOCUS ON QUEENS RESIDENTS

Queens has been selected for a one-year study on how oxygen treatment during sleep will affect people suffering from chronic obstructive pulmonary disease.

The \$100,000 clinical grant was awarded to Dr. Rubin Cohen of Long Island Jewish Medical Center to conduct the year-long study that will begin in July. The grant was made by the American Lung Association of the City of New York and was based on a bequest to the organization that the study be done in Queens.

COPD refers to a large group of diseases of the lungs that are characterized by obstruction to the airflow interfering with normal breathing. Emphysema and chronic bronchitis are the most common conditions of COPD and often coexist.

LauraLee Munson, spokesperson for the American Lung Association of the City of New York, said that COPD is definitely on the rise and the majority of cases are related to smoking cigarettes. Last year in Queens, 20,000 hospital days per year were attributed to COPD cases.

An estimated 1 million New Yorkers suffer from the disease, with about 280,000 living in Queens. This is higher than average for the five boroughs that make up New York City.

Dr. Cohen's study will look into oxygen therapy during sleep. Researchers hope that the treatment will decrease inflammation in the body, improve the quality of sleep and improve the person's ability to take part in daily activities.

Recent studies have shown that people who suffer from COPD have particularly low oxygen levels at night, even though their daytime levels are within normal parameters. The role of oxygen treatment in these patients is not clear.

.....zwire.com



CONSUMER HEALTH ALLIANCE FOR SAFE MEDICATION PETITIONS FDA TO BETTER PROTECT PATIENTS

Today, the Consumer Health Alliance for Safe Medication (CHASM) submitted a Citizen Petition to the Food and Drug Administration (FDA) urging the agency to enforce public safeguards relating to manufacturing, promotion and

dispensing of unapproved respiratory medications. CHASM, a coalition of patients, nurses, physicians and respiratory therapists dedicated to ensuring that patients with respiratory conditions have access to safe and effective medications, is calling for greater transparency from pharmacy manufacturers of compounded (mixed in a pharmacy) respiratory drugs.

"Consumers generally believe that all prescription medications are approved by the FDA as safe and effective. However, an increasing number of pharmacy businesses are manufacturing, promoting and dispensing unapproved respiratory drugs as substitutes for FDA-approved medications. Without their knowledge, patients with asthma, emphysema and other respiratory conditions are increasingly exposed to unnecessary health risks associated with these medications," said Nancy Sander, President of Allergy & Asthma Network Mothers of Asthmatics (AANMA). "CHASM's Citizen Petition is a first step in demanding that the FDA take immediate action on this important issue."

.....PRNewswire



AIR PASSENGERS 'RISKING HEALTH'

More than half of air passengers are risking their health flying by being starved of oxygen, a study says.

A Belfast hospitals and university team found oxygen levels in the blood dropped so low in 54% of passengers that they would need extra supplies.

Oxygen levels dropped by 4% on average the study of 84 passengers found.

But the UK air regulator said people with heart and lung problems should consult their doctor before flying but healthy people need not be concerned.

Oxygen levels on the ground averaged 97%, but once their plane was in the air they fell to 93% on average, the study published in the *Anaesthesia* journal said.

Some physicians put hospital patients with blood levels below 94% on extra oxygen.

The researchers said the drop could increase the chance of breathing difficulties, headaches and angina attacks for those who suffered from them.

This has become a greater problem in recent years as modern aeroplanes are able to cruise at much higher altitudes Dr Susan Humphreys, lead researcher

Anaesthetists took oxygen levels from 55 passengers on long-haul flights lasting more than two hours, with the remaining on short-haul flights.

The measurements were similar for both groups, which were made up of people aged between one and 78 years old.

Lead researcher Dr Susan Humphreys, an anaesthetic specialist registrar at the hospital, said: "We believe these falling oxygen levels, together with factors such as dehydration, immobility and low humidity, could contribute to illness during and after flights.

Problem

"This has become a greater problem in recent years as modern aeroplanes are able to cruise at much higher altitudes."

The study comes after House of Lords Science and Technology Select Committee and Department of Transport

reports called for more research to be carried out on the health impact of flying.

But a spokesman for the Civil Aviation Authority, the UK air regulator, said healthy passengers need not worry.

"The oxygen levels would not be harmful to healthy passengers, we are only talking about people with health problems, such as lung and heart.

"The advice to those people is consult with your doctor before flying, and that still stands.

"We have always known oxygen levels fall when a plane is flying."

.....BBC NEWS



HOW DOES ALTITUDE AFFECT YOUR BODY?

When we talk about the effects of altitude upon the human body and altitude sicknesses we tend to think in terms of "high altitude" and classify that as somewhere in the flight levels. Not always so. Your body will be adversely affected by prolonged exposure to any altitude above that at which you've been living. A resident of coastal California will not perform nearly as efficiently at any task in Denver, where the ground is a mile high, as will a native Denverite, but most would not consider being on the ground at Denver as being at "high altitude." Your body and brain, however, will have a different perspective on the matter.

How the Human Body Uses Oxygen

Let's start our discussion of the effects of altitude on our bodies by first discussing how the body normally acquires, transports and uses oxygen. The importance of all those gas laws should become clearer. We're all aware that oxygen is necessary to sustain combustion or oxidation. It is necessary in the human body for the same reasons -- to support the oxidation of fuels needed to provide energy for life.

Very little of the oxygen carried by the blood is carried in dissolved form in the plasma. Most of the oxygen -- almost 98% -- is transported by the hemoglobin molecules in the red blood cells. The ability of hemoglobin to combine with and transport oxygen is dependent upon the pressure of oxygen in the surrounding environment. Higher pressures of oxygen enable the hemoglobin to take up larger quantities of oxygen. Lower oxygen pressures will result in an increasing tendency by the hemoglobin to give up oxygen. This variable combining characteristic is what allows the blood to acquire oxygen in the lungs and transport it to the tissues where it is used in metabolism. This characteristic of the hemoglobin also results in what is known as the oxygen dissociation curve (see graph below). While we've seen that oxygen pressure decreases a bit less than linearly with altitude, the ability of the hemoglobin to hold oxygen follows a much different curve. There is a big change for the worse in the hemoglobin's ability to combine with oxygen that occurs in the low twenties.

Air entering the lungs at sea level enters at a pressure of 760 mm Hg. This results in a partial pressure of oxygen in sea level air of about 160 mm Hg. (that's about 21% of 760 mm). The blood flowing through the lungs isn't exposed to atmospheric air though. Blood comes in contact with alveolar air -- the air mixture contained in the tiny air sacks of the lungs

-- which is only 14% oxygen. (This is because of the addition of water vapor to the air you breath in plus the carbon dioxide that has diffused from the blood returning from the tissues.) The partial pressure of oxygen in alveolar air is about 14% of 760 mm Hg or 106.4 mm Hg. Carbon dioxide, which is 5.5% of alveolar air (as contrasted to less than 1% in the atmosphere) exerts a pressure of 41.8 mm Hg.

The hemoglobin in the blood returning from the tissues carries oxygen at a pressure of about 40 mm Hg. Graham's Law governs the diffusion of oxygen from the higher pressure of the alveolar air to the blood and the diffusion of carbon dioxide from the blood to the alveolar sacks. The opposite transfer takes place when the oxygen rich blood reaches the tissues which carry oxygen at an average pressure of 20 mm Hg. This lower pressure will allow the hemoglobin to release oxygen which will then diffuse into the tissues. At the same time, carbon dioxide is diffusing from the tissues into the blood. (An average pressure for CO in the tissues is 50 mm Hg.; however, this is dependent upon the activity level of the tissue.) Getting hypoxic yet from all this high altitude discussion??

A pulse oximeter measures the oxygen saturation of your blood non-invasively.

In a normal, healthy individual, sea level pressure is sufficient to cause the blood leaving the lungs to be almost totally (97%) saturated with oxygen. At 10,000 feet the saturation has dropped to almost 90% -- still sufficient for nearly all usual life functions. An oxygen saturation of 93% is considered by medical folks to be the low limit of normal functioning. On top of Pike's Peak (about 14,500 feet and 438 mm Hg atmospheric pressure) the oxygen saturation has dropped to about 80%. Many people, if left in this rarefied air for some period, will develop mountain or altitude sickness: vertigo, nausea, weakness, hyperpnea (increased breathing), in coordination, slowed thinking, dimmed vision and increased heart rate. At 25,000 feet the oxygen saturation is only 55% and consciousness is lost. (Note that the partial pressure of oxygen in alveolar air at 25,000 feet is 14% of 281.8 mm Hg or 39.5 mm Hg -- slightly less than that normally found in venous blood returning from the tissues. Which way do you think the oxygen will diffuse at altitudes above 25,000 feet?)

Nowadays, a tiny instrument called a pulse oximeter that clips on the finger and, by passing a light beam through the vascular bed of the fingertip, measures the oxygen saturation of the blood and displays it on a digital readout. Think of it as a "hypoxia meter" that allows you to see precisely how hypoxic you are at any given time.

.....AVWeb



SLEEP PATTERNS LINKED TO DIABETES RISK

Sleeping for less than six hours or for more than nine hours each night is associated with an increased risk of diabetes and impaired blood sugar (glucose) tolerance, researchers report in this week's issue of the Archives of Internal Medicine.

"There are a lot of people who sleep five or six hours per night who we generally think are not getting enough sleep," lead author Dr. Daniel J. Gottlieb told Reuters Health. His group hypothesized that people who do not get enough sleep

may be at increased risk of developing diabetes or impaired glucose tolerance.

Gottlieb, of Boston University School of Medicine, and colleagues enrolled 1,486 subjects, ages 53 to 93 years, in their study. The subjects completed questionnaires regarding sleep patterns and underwent fasting glucose and glucose tolerance testing.

Diabetes was present in 20.9 percent of subjects and impaired glucose tolerance was present in another 28.2 percent. A usual sleep time of six hours or less was reported by 27.1 percent, including 8.4 percent who reported five hours or less. A total of 8.6 percent said that they slept for nine hours or more.

Compared with subjects who slept for seven to eight hours each night, the risk of diabetes was increased by 2.5-fold in those sleeping five or less hours, 1.66-fold for those sleeping six hours, and 1.79-fold for those sleeping nine or more hours. The corresponding increased risks of developing impaired glucose tolerance were 1.33-, 1.58-, and 1.88-fold. Blood glucose levels were not significantly affected by insomnia.

"These are strong associations suggesting that voluntary sleep restriction may cause impaired glucose regulation," Gottlieb said. "Probably those sleeping nine hours or more per night are doing so because of some underlying condition that may not be diagnosed but that puts them at increased risk of diabetes," he suggested.

The authors also noted that adequate levels of sleep should be tested as a non-drug treatment strategy in patients with diabetes or impaired glucose tolerance.

Sleeping for at least seven hours a night, Gottlieb concluded, "is a good health practice for a variety of reasons, and this is one more reason."

.....Archives of Internal Medicine



NEW FOOD PYRAMID PRAISED BY AMERICAN COUNCIL ON EXERCISE

The United States Department of Agriculture (USDA) recently introduced the newly renovated Food Guidance System entitled "MyPyramid". The updated system includes a new symbol and a variety of food guide pyramids designed to fit the unique dietary and physical activity needs of every American. The American Council on Exercise (ACE), America's nonprofit fitness authority, supports the creation of personalized food guide pyramids in an effort to encourage Americans to lead healthier lives through balanced diet and exercise.

"The new food guide pyramid should help consumers have an easier time building healthier diets," said Dr. Cedric Bryant, chief exercise physiologist for ACE. "It supports what ACE has been encouraging Americans to do since our inception - eat a variety of healthful, nutritious foods and find a proper balance between diet and exercise. In the long run, this balance will produce positive, lasting results including weight loss, improved fitness and a reduced risk of various chronic diseases and a number of other physical ailments."

The Agriculture Department's "Steps to a Healthier You" campaign provides interactive Web pages where Americans

can insert their current exercise and eating habits to find the right pyramid for them. <http://www.mypyramid.gov> provides 12 different pyramids adjusted to various lifestyle needs as well as necessary information and tools to help Americans follow through on the new food guidance system.

The updated Food Guidance System is based on recommendations outlined in the U.S. Dietary Guidelines released early January 2005 that ACE continues to support. Recommendations such as the following:

- To manage body weight and prevent unnecessary weight gain, engage in 60 minutes of moderate-to-vigorous physical activity on most days of the week
 - Consume a sufficient amount of food groups including: four and a half cups of fruit and vegetables, three or more ounces of whole-grain products, five and a half ounces of lean meat or beans and three cups of fat-free or low-fat milk (or similar dairy products) per day
 - Keep total fat intake between 20 to 35 percent of calories
 - Consume whole foods rather than processed options (e.g., fresh fruit instead of juice)
 - Choose or prepare foods with little added sugar and salt
- “The additional illustration of a person climbing stairs on the ‘MyPyramid’ symbol helps reinforce the important and necessary role exercise plays in leading an overall healthier lifestyle,” said Bryant.

.....The American Council on Exercise



AMERICAN DIETETIC ASSOCIATION STATEMENT ON NEW 'MYPYRAMID'

Statement by Susan H. Laramee, registered dietitian and president of the American Dietetic Association, on the April 19 release of the new "MyPyramid" Food Guidance System graphic symbol by the U.S. Department of Agriculture:

The ultimate value and success of the new "MyPyramid" Food Guidance System graphic will be measured by whether it can serve as an effective tool to help people eat according to the 2005 Dietary Guidelines for Americans. Time will tell if MyPyramid will convey to consumers the vital nutritional messages of balance, variety, moderation and adequacy. If MyPyramid can assist people in effectively adopting the recommendations of the Dietary Guidelines, it will be a great success.

As the American Dietetic Association recommended to the USDA last year, the iconic and widely known shape of the Food Guide Pyramid has been retained as the government's primary graphical symbol of variety, proportion and moderation in making good nutritional choices. ADA recommended that the educational messages within and accompanying the Pyramid should be updated to improve consumer understanding, which has also been done.

ADA believes no one graphic symbol can or should serve as a stand-alone consumer nutrition education tool. Many surveys over the years, including ADA's own 1997 nutrition trends survey, found most people recognize the Food Guide Pyramid. The problem is that few people really understood the Pyramid and even fewer followed it. What is needed is what the

USDA announced today: a Food Guidance System that includes a graphic symbol plus consumer messages and motivational and educational tools that work together to guide people toward healthy food choices.

The 2005 Dietary Guidelines emphasize greater consumption of fruits, vegetables, low-fat dairy products and whole grains - foods that are naturally high in nutrients and low in calories. That is consistent with ADA's positions and consumer messages that emphasize the individual's total diet, or overall pattern of food consumed. ADA and the Dietary Guidelines for Americans agree that the keys are:

- Take a personalized approach to dietary advice and weight management, recognizing one size does not fit all.
- Eat a variety of foods from every group in balance and in moderation.
- Pay attention to calorie consumption.
- Achieve a balance between food and regular physical activity.

The American Dietetic Association was deeply involved with the development of the Dietary Guidelines, and we will be just as involved in using them to set the nation's policy directions in nutrition programs, research, education, food assistance, labeling and promotion. On an individual level, our members will incorporate MyPyramid and its accompanying materials into our client counseling, patient care and consumer education.

The food and nutrition experts of the American Dietetic Association are committed to helping people understand and apply the recommendations of the 2005 Dietary Guidelines for Americans in their daily lives.

The American Dietetic Association is the nation's largest organization of food and nutrition professionals. With nearly 65,000 members, the Chicago-based ADA serves the public by promoting optimal health and well-being for all people.

.....American Dietetic Association



NEW U.S. FOOD GUIDANCE SYSTEM DIFFERENTIATES AMONG TYPES OF FAT

Healthy fats are distinguished from unhealthy fats in the new US Food Guidance System unveiled today by the U.S. Department of Agriculture (USDA). The U.S. Canola Association (USCA), which called for such distinction, applauds "MyPyramid" and its related messages about oils and fats.

In its comments to the U.S. government in August 2004 about revising the Food Guidance System, the USCA recommended that a graphic and related messages differentiate among types of fats, namely between healthy unsaturated fats and unhealthy saturated and trans fats, and support a minimum intake level of healthy fats. The new system does so by representing oils as one of six bands in MyPyramid, which are needed each day for good health, and providing recommendations for choosing healthy oils "Inside MyPyramid."

In the latter recommendations, the USDA distinguishes between oils and solid fats as well as among vegetable oils

based on saturated fat content. Vegetable oils and foods that contain mainly oil with no trans fat are recommended to be the main sources of fat in the diet, with the exception of coconut and palm kernel oils, which the USDA notes are "high in saturated fats and for nutritional purposes should be considered to be solid fats."

"The type of fat matters as much as the amount of fat consumed," said John Haas, USCA president. "The USCA agrees with the USDA's recommendation to keep total fat intake moderate and to consume mainly healthy fats that come from sources such as vegetable oils low in saturated fat."

Illustrating this concept, the new Food Guidance System depicts moderation by the narrowing of each food group band from bottom to top. The wider base stands for foods with little or no solid fats, added sugars, or caloric sweeteners, which "should be selected more often to get the most nutrition from calories consumed," according to the USDA. In addition, proportionality is shown by the different widths of the food group bands.

As listed in the oils section of "Inside MyPyramid," canola oil is a vegetable oil used in cooking that fits into the wide base of the oils food group. It is high in mono- and polyunsaturated fats and the lowest in saturated fat of any standard vegetable oil on the market.

.....U.S. Canola Association



WORLD'S FASTEST GROWING WEIGHT LOSS COMPANY WEIGHS IN ON NEW FOOD PYRAMID

The new Food Pyramid released today by the U.S. Department of Agriculture (USDA) proves that one size does not fit all when it comes to weight loss and healthy nutrition. The new standard replaces a single pyramid with 12 pyramids, individually tailored to fit various lifestyles. That degree of personalization is the precise model on which LA Weight Loss has been based since 1989.

"The new standard shows once and for all that diets must be customized to the individual according to their lifestyle, activity levels, and age groups," says Dr. Boyd Lyles, Medical Director of LA Weight Loss and Director of the HeartHealth and Wellness Center in Dallas. "Our program has always espoused the same approach: providing our clients with one-on-one counseling and personalized meal plans developed specifically to individual needs."

Dr. Lyles is available for immediate interviews, and can provide members of the press with expert commentary and analysis regarding the USDA's updated Food Pyramid.

As part of the revamped model, the USDA has wisely reduced the amount of daily sugar intake and increased the daily amount of fruits and vegetables, which matches exactly with the LA Weight Loss program's recommendations of low sugar, low saturated fat, high fiber, and an emphasis fruits and vegetables. As a result, it's now even easier for LA Weight Loss clients to follow these new recommendations because they are consistent with the long-held guidelines of the program.

Both LA Weight Loss and the USDA stress meal planning and portion control as crucial to establishing the healthy eating

habits that lead to short-term weight loss and long-term weight maintenance. Meal planning, for example, is essential when trying to consume more servings of fruits and vegetables a day; and time needs to be allotted for frequent grocery store visits to ensure the freshest, ripest produce.

One area that the USDA does not address, however, is the role of support systems to help maintain its suggested food guide in the everyday diet. While the new standards do provide a more balanced approach to healthy eating, the majority of Americans may find the guidelines difficult to follow. That's why LA Weight Loss not only provides clients with menu ideas, but also basic nutritional counseling and one-on-one support.

.....SOURCE LA Weight Loss Centers



52% OF AMERICANS NOT LIKELY TO FOLLOW NEW FOOD GUIDE PYRAMID

A new survey has shown that 52% of Americans say they are "not likely" to follow the recommendation to consume "at least nine servings of fruits and vegetables per day". (Nationwide telephone survey of 1,004 American adults, 18 and older. The margin-of-error is plus/minus 3.1 percentage points. Interviews conducted March 24 - 26, 2005. Additional data is available upon request).

Wild Oats Markets Provides Tips for Navigating the New Food Pyramid

WHAT: The new USDA dietary guidelines and Food Pyramid are provoking more questions than answers. With more than half of consumers unclear about following the new Pyramid, Wild Oats Markets, a natural and organic foods market, can help consumers translate it into simple to follow steps for planning meals that they can follow.

- Approach changes in your diet in small steps
- Eat from the perimeter of the store -- look for superfoods such as fruits and vegetables that are nutrient rich and less-processed
- Increase consumption of whole grains (look for "whole" or "whole grain" as the first words on the ingredient list)
- Increase consumption of no and low fat dairy and lean meat-
- Decrease consumption of pre-prepared foods
- Limit intake of fats, including trans fats (hydrogenated oils)
- Recognize different dietary needs for each member of the family

WHO: Wild Oats has information available in stores, including knowledgeable, trained health professionals to provide store walk-thrus to help consumers follow the tips above. Recipes are available upon request.

WHEN: Immediately

WHERE: Wild Oats Markets near you

ADDITIONAL SURVEY FINDINGS

- More Americans get their nutrition information from a nutritionist/dietitian and local health food stores (54%) combined, than from the government (20%)(*)

- 50% of Americans say they are "not likely" to follow the recommendation to consume "at least nine servings of fruits and vegetables per day"(*)
- When asked how they'd determine if a product is "whole grain" (new dietary guidelines recommend 3 or more ounce-equivalents of whole-grains per day), 62% said that they would do so by "checking the label/look for specific words."(*)

(*) *Nationwide telephone survey of 1,004 American adults (18 and older). The margin-of-error is plus/minus 3.1 percentage points. Interviews conducted March 24 - 26, 2005.*

.....medicalnewstoday.com



BUILDING THE PYRAMID

The Government's Updated Nutrition Icon Lets You Personalize Its Recommendations -- Provided You Have Internet Access

Limber up your fingers, swab your computer screen and grab a cup of your favorite low-cal beverage. The federal government's new food guide system hands you the blueprints to construct your own detailed food pyramid, but be prepared to spend some time building it — if you have access to a computer and the Internet, that is.

The new icon is based on the 2005 Dietary Guidelines jointly issued in January by the Department of Health and Human Services and the Department of Agriculture (USDA) to wide acclaim. For the first time, the agencies have made it possible to customize the pyramid to your age, gender and activity level and to decide whether to maintain your current weight or reach a healthier one.



In giving the pyramid a facelift, the USDA and its partner, the international marketing firm Porter Novelli, essentially turned the old version on its side. Gone are the horizontal lines designating food categories. Instead, the new pyramid represents the same categories using colorful stripes that run from tip to base. It also has a staircase marching up one side, a reminder for the chronically sedentary American public to be more active.

Unlike the old pyramid, the new version can be both interactive and customized. It puts into practice the 2005 Dietary Guidelines, widely considered the among the best issued. But for now the new pyramid is almost entirely a creature of the Web— a fact that has drawn criticism from some nutrition experts as well as consumer and industry groups. Critics say that tax dollars are ill spent if those who need the pyramid's information require a computer and Internet access to get it.

"People need very clear advice without having to log onto the Web," said Margo G. Wootan, nutrition policy director of the consumer advocacy group Center for Science in the Public Interest. The government "is pinning their hopes to combat obesity on a Web site that is sure to lead to disappointment."

In the first 72 hours, the pyramid Web sites logged 160 million hits—20 percent of them from outside the country,

according to the USDA. This overloaded the sites' computers, making them inaccessible. The USDA quickly added computing power, which seemed to resolve the problem.

The food industry is also poised to help spread the word about it, as they did with the last version, which was introduced in 1992. Last week, General Mills became the first company to announce plans to put the pyramid on some of its food product labels. The Grocery Manufacturers of America said it plans to team with Weekly Reader Corp., publisher of the venerable magazine for schoolchildren, to create an insert on the revised pyramid for next fall. Government-sponsored food assistance programs will also be able to print copies of the pyramid for lower-income individuals who may not have access to the Internet.

But for most, if you want to begin using the pyramid to understand and apply the guidelines, you'll need to log onto the Internet. Here's what the digitized guide offers, along with some tips on how to use it:

First, scale MyPyramid. Start at <http://mypyramid.gov/>. You can skip the traditional "www" in the Web address for more direct access. Once at the site, click on "My Pyramid Plan" on the left. You'll be prompted to enter your age, sex and physical activity level. (Don't worry, no judgments are made and this information isn't stored.)

A page pops up that displays how many servings of each food group you need to eat daily to meet the guidelines — information that the previous pyramid required you to figure out on your own. So a 45-year-old guy who gets less than 30 minutes daily of activity is advised to eat 2,200 calories daily. Those calories should come from 7 ounces of grains (half of them whole grains), 3 cups of vegetables, 2 cups of fruit, 3 cups of milk, 6 teaspoons of healthful oil (margarine, olive oil, nuts, avocados) and 6 ounces of protein, which could be lean meat, poultry without the skin, fish, peanut butter, eggs, meat substitutes or beans.

Compare that with a 62-year-old sedentary woman who is advised to eat 1,600 calories daily from 5 ounces of grains (half of them whole grains); 2 cups of vegetables, 1½ cups of fruit; 3 cups of milk, 5 ounces of protein and 5 teaspoons of healthful oil.

Dig deep, but keep moving. Almost everything on the site links to more information, but you'll need to keep clicking to access it. You have 45 minutes per session to do it. USDA times out sessions to give more people access, although last week the Web site had such an unexpectedly high volume that it was mostly inaccessible for the first two days.

Among the valuable nuggets: MyPyramid Worksheet, a blank form you can print out and post on your refrigerator. It lists your daily food goals. (Find it on the right hand side of your home page for My Pyramid Plan.) Carry it with you as a reference and to record what you eat. It also includes tips for making wise choices in each food group, a place to list the next day's goals and a rating for how well you think you did in meeting today's goals.

Take the stairs. At MyPyramid, choose "Inside the

Pyramid," then click on the stairs. The stairway is a new feature on the pyramid -- an attempt to help you be more active. The first click gives you the basic goals of 30 minutes of moderate activity daily for adults; 60 minutes for kids. Click on "physical activity" or on the "Learn More" buttons and you'll get a brief list of moderate and vigorous activities. You can also learn how many calories various activities burn (based on a 154-pound man) and find tips to boost physical activity and learn the health benefits of exercise. At the companion Web site <http://mypyramidtracker.gov/>, you can log your physical activity for up to a year. (More on this below.)

Play with the colors. The old pyramid drew complaints that it was vague and incomplete. The new icon has come under similar attack. But if you have patience, there's a wealth of information.

On the left side of "My Pyramid," click "Inside the Pyramid." Once there, click on each stripe — orange for grains, green for vegetables, red for fruit, yellow for healthful oils, blue for milk, purple for lean meat, poultry, seafood, beans and eggs — to see a few healthful examples of foods from each group. There are also simple tips, such as "Go low-fat or fat-free" with milk and "If you don't or can't consume milk, choose lactose-free products or other calcium sources." Also, the pyramid is arranged so plant-based foods start at the left; animal-based foods are on the far right. The strand of healthful oil—made thin to imply smaller quantities—runs from tip to base between the two.

Check out the "Learn More" buttons. They help eliminate some guesswork. Commonly used measurements—cups, ounces and teaspoons—are used instead of the former generic "servings," which drew frequent complaints.

But unless you're a registered dietitian—or an advanced student of the Lean Plate Club—the fact that an ounce of grains is equal to a slice of bread may not immediately come to mind. That's where the "Learn More" buttons come in handy and where you'll find answers to such as questions as, "What's a cup of vegetables?" The equivalents: One cup of raw or cooked vegetables (such as carrots, broccoli, peas, string beans) or vegetable juice (V8 or tomato), or two cups of raw leafy greens (lettuce, spinach, arugula).

Keep records. The companion site <http://mypyramidtracker.gov/> replaces the previous Interactive Healthy Eating and Physical Activity Index, which was clunky, slow and recorded only 20 days of food or activity records. MyPyramidTracker is faster (when it's not overloaded with users), tracks up to a year's worth of food and exercise records and creates graphs that compare results to the dietary guidelines. It still doesn't rival some commercial software, but it's also free. And you can use it to improve your eating and exercise habits, maintain your weight or guide you in reaching a healthier weight.

You can access the site without registering just to check it out. But to use it regularly you'll need to register. Records are password-protected and accessible from any place there's Web access. For those worried about privacy, the USDA said that it

won't link records to individuals.

Play professional . Peek into the professional area of MyPyramid.gov (find the link on the left side of the screen) to find more resources, including downloadable pyramids that can be used for teaching. Click on MyPyramid Food Intake levels to find 12 eating patterns based on age, sex and activity level. Or check out "Sample Menu" for a week's worth of meals that will meet all the dietary guideline requirements for someone eating 2,000 calories daily. ?

.....The Washington Post



A Dash of Onion Halts Bone Loss in Rats

Onions can spice up your meals—and maybe strengthen your bones, preliminary study findings suggest.

Investigators from the University of Bern in Switzerland found that after eating a small fraction of an ounce of onion with their food, rats became significantly less likely to lose bone.

These findings suggest that adding onion to food may help people fight off the bone-thinning disease osteoporosis, study author Dr. Rudolf Brenneisen told Reuters Health.

He added that people would need to eat at least 400 grams - or 14 ounces - of onions each day to equal the amount rats ate during the study. Brenneisen noted that this is not the first study to show that what you add to your food can add to the health of your bones. For instance, he and his colleagues have shown that other vegetables and fruits may also inhibit bone loss in rats.

The researcher added that people using diet to strengthen their bones should make sure to include dairy products, since those foods can also strengthen bones.

To look further into whether onion helps keep bones strong and healthy, Brenneisen and his colleagues fed rats 1 gram of onion, then tested them to see how their bones were faring.

The findings, which appear in the Journal of Agricultural and Food Chemistry, show that after eating onions, the rats underwent significantly less bone resorption, the loss of minerals from the bones that characterizes osteoporosis. "Onion added to the food of rats inhibited significantly bone resorption," according to Brenneisen.

To investigate what in onions was helping bones, the researchers mixed different components of an onion extract with bone cells.

One onion ingredient—called gamma glutamyl peptide—appeared to be most effective at inhibiting bone resorption, suggesting it is responsible for onion's bone-boosting effects, the authors note.

..... Journal of Agricultural and Food Chemistry



WEBB COOKS BY ROBYN WEBB, MS, LN

Although the winter has not been too bad this year, frankly I'm ready to say goodbye to wintry weather and hello to spring. Spring time is a cooks dream; the food is lighter, more colorful and fresh tasting. Spring officially arrives in a week and I will welcome it with open arms!

To get you excited about the season ahead, I think it is the produce that really shines at this time of year, so here are three terrific ideas of what to do with the spring crop. Already the tomatoes are looking better, the asparagus a bit greener, and the first signs of corn are arriving in small batches. So leave the drab brown and long cooking vegetables behind and perk up your appetite with these light and nutritious ideas.

For a lovely light lunch, consider Tri Colored Tortellini and Pea Salad. Fresh tomatoes, peas and corn are tossed with colorful tortellini all bathed in a light balsamic vinegar dressing. You could also change the dressing to a red wine vinegar base. Refrigerate the salad for at least ½ hour to blend the flavors. And when cutting tomatoes, be sure to seed them. The seeds are slightly bitter, so removing them will ensure a more flavorful salad.

Corn and Pepper Saute is almost too pretty to eat. This medley can be served either hot or cold. If the corn in your produce section is not quite up to par yet, frozen and thawed corn will work just fine. For a sweeter mixture, use white corn instead of yellow.

Dress up asparagus with some brightly colored roasted red peppers, toss in a few herbs and a bit of lemon and olive oil and you've got a colorful salad that's fit for a brunch table. Asparagus and Roasted Red Pepper Salad is a snap to fix and it brings out the best in seasonal asparagus. Feel free to use canned roasted red pepper to save time.

Remember to store your spring vegetables for just a short time. Unlike winter vegetables like winter squashes and tubers, vegetables like tomatoes, asparagus, and corn spoil quicker. For best nutrition, it is wise to grocery shop for vegetables twice a week. And besides, with the warm weather approaching, it's your chance to get out and breathe in the fresh spring air!

All three of these springtime vegetable dishes provide ample amounts of vitamin C, fiber, calcium, and potassium. When choosing starches for your meal plan, starchy vegetables like spring peas and corn are always a good choice. They provide much more fiber, vitamins and minerals than bread and pasta do.

I'm excited about the beautiful spring days to come and the produce to fill the bounty of my table.

RECIPES:

Tri Colored Tortellini and Pea Salad

6 servings/ serving size: ½ cup
Preparation time: 25 minutes
Exchanges: 2 starch; 1 fat
Calories: 220; Calories from fat: 54; Total fat: 6g; Saturated fat: 1g; Cholesterol: 32mg; Sodium: 167mg; Carbohydrate: 33g
Dietary fiber: 2; Sugars: 4g; Protein: 7g

Ingredients

3 Tbsp balsamic vinegar
1 Tbsp olive oil
2 tsp minced chives
Salt and pepper to taste

½ pound frozen tortellini (reduced fat cheese filled)
1 cup diced red pepper
3 plum tomatoes, seeded and diced
1 (15 ounce) can artichoke hearts, drained and halved
½ cup fresh corn
½ cup fresh peas

Cooking Instructions

- Whisk together oil, vinegar, chives, salt, and pepper.
- Combine all remaining ingredients in a large salad bowl. Pour the dressing over and toss. Cover and refrigerate at least ½ hour prior to serving.

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Corn and Pepper Sauté

6 servings/ serving size: ½ cup
Preparation time: 20 minutes
Exchanges: 1 starch
Calories: 71; Calories from fat: 23; Total fat: 3g; Saturated fat: 0g; Cholesterol: 0mg; Sodium: 29mg; Carbohydrate: 13g
Dietary fiber: 2g; Sugars: 3g; Protein: 2g

Ingredients

1 Tbsp canola oil
½ cup chopped onion
1 ½ cups corn (scrape right off the cob or use frozen and thawed)
½ cup diced red pepper
½ cup diced green pepper
½ pint cherry tomatoes, halved
2 Tbsp fresh lemon juice
2 Tbsp minced basil (optional)
Salt and pepper to taste

Cooking Instructions

- Heat oil in a large skillet over medium high heat. Add onion and sauté for five minutes.
- Add corn and peppers and sauté for five minutes. Add the cherry tomatoes and lemon juice. Cover and cook for two to three minutes. Add in the basil, salt, and pepper. Cook one minute.

Asparagus and Roasted Red Pepper Salad

6 servings/ serving size: ½ cup
Preparation time: 20 minutes
Exchanges: 1 vegetable
1 monounsaturated fat
Calories: 67; Calories from fat: 5g; Saturated fat: 0g; Cholesterol: 0mg; Sodium: 102mg; Carbohydrate: 5g; Dietary fiber: 2g; Sugars: 3g; Protein: 2g

Ingredients

¾ pound fresh asparagus
½ cup diced roasted red peppers (jarred is fine)
½ cup sliced canned artichoke hearts
2 Tbsp olive oil

2 Tbsp lemon juice

1 Tbsp red wine vinegar

1 Tbsp minced parsley

1 tsp minced fresh dill

Salt and pepper to taste

Cooking Instructions

- Cut off the tough ends of the asparagus. Slice each asparagus spear diagonally into three pieces. Bring two quarts of water to a boil. Add asparagus and turn off the heat. Let the asparagus stand in the water for one minute. Drain the asparagus and run cold water over it. Drain well.
- In a salad bowl, add drained asparagus. Add in roasted peppers and artichoke hearts.
- Whisk oil, lemon juice, vinegar, parsley, dill, salt and pepper together. Pour dressing over the salad. Cover and refrigerate until serving time.

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VERY LEMONY CHICKEN

Using skinless chicken breasts means this tangy dish is lower in saturated fat and cholesterol.

1-1/2 lb chicken breast, skinned and fat removed

½ C fresh lemon juice

2 Tbsp white wine vinegar

½ C fresh sliced lemon peel

3 tsp chopped fresh oregano or 1 tsp dried oregano, crushed

1 medium onion, sliced

1/4 tsp salt

to taste black pepper

½ tsp paprika

Place chicken in 13x9x2-inch glass baking dish.

Mix lemon juice, vinegar, lemon peel, oregano, and onions.

Pour over chicken, cover and marinate in refrigerator several hours or overnight, turning occasionally.

Sprinkle with salt, pepper, and paprika.

Cover and bake at 325° F for 30 minutes. Uncover and bake 30 minutes more or until done.

Yield: 4 servings—Serving Size: One chicken breast with sauce

Each serving provides: Calories: 154; Total fat: 5 g; Saturated fat: 2 g; Cholesterol: 63 mg; Sodium: 202 mg

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DIABETES MYTHS

Myth #1 You can catch diabetes from someone else.

No. Although we don't know exactly why some people develop diabetes, we know diabetes is not contagious. It can't be caught like a cold or flu. There seems to be some genetic link in diabetes, particularly type 2 diabetes. Lifestyle factors also play a part.

Myth #2 People with diabetes can't eat sweets or chocolate.

If eaten as part of a healthy meal plan, or combined with exercise, sweets and desserts can be eaten by people with diabetes. They are no more "off limits" to people with diabetes, than they are to people without diabetes.

Myth #3 Eating too much sugar causes diabetes.

No. Diabetes is caused by a combination of genetic and lifestyle factors. However, being overweight does increase your risk for developing type 2 diabetes. If you have a history of diabetes in your family, eating a healthy meal plan and regular exercise are recommended to manage your weight.

Myth #4 People with diabetes should eat special diabetic foods.

A healthy meal plan for people with diabetes is the same as that for everyone low in fat (especially saturated and trans fat), moderate in salt and sugar, with meals based on whole grain foods, vegetables and fruit. Diabetic and "dietetic" versions of sugar-containing foods offer no special benefit. They still raise blood glucose levels, are usually more expensive and can also have a laxative effect if they contain sugar alcohols.

Myth #5 If you have diabetes, you should only eat small amounts of starchy foods, such as bread, potatoes and pasta.

Starchy foods are part of a healthy meal plan. What is important is the portion size. Whole grain breads, cereals, pasta, rice and starchy vegetables like potatoes, yams, peas and corn can be included in your meals and snacks. The key is portions. For most people with diabetes, having 3-4 servings of carbohydrate-containing foods is about right. Whole grain starchy foods are also a good source of fiber, which helps keep your gut healthy.

Myth #6 People with diabetes are more likely to get colds and other illnesses.

No. You are no more likely to get a cold or another illness if you have diabetes. However, people with diabetes are advised to get flu shots. This is because any infection interferes with your blood glucose management, putting you at risk of high blood glucose levels and, for those with type 1 diabetes, an increased risk of ketoacidosis.

Myth #7 Insulin causes atherosclerosis (hardening of the arteries) and high blood pressure.

No, insulin does not cause atherosclerosis. In the laboratory, there is evidence that insulin can initiate some of the early processes associated with atherosclerosis. Therefore, some physicians were fearful that insulin might aggravate the development of high blood pressure and hardening of the arteries. But it doesn't.

Myth #8 Insulin causes weight gain, and because obesity is bad for you, insulin should not be taken.

Both the UKPDS (United Kingdom Prospective Diabetes Study) and the DCCT (Diabetes Control & Complications Trial) have shown that the benefit of glucose management with insulin far outweighs (no pun intended) the risk of weight gain.

Myth #9 Fruit is a healthy food. Therefore, it is ok to eat as much of it as you wish.

Fruit is a healthy food. It contains fiber and lots of vitamins and minerals. Because fruit contains carbohydrate, it needs to be included in your meal plan. Talk to your dietitian about the amount, frequency and types of fruits you should eat.

Myth #10 You don't need to change your diabetes regimen unless your A1C is greater than 8 percent.

The better your glucose control, the less likely you are to

develop complications of diabetes. An A1C in the sevens (7s), however, does not represent good control. The ADA goal is less than 7 percent. The closer your A1C is to the normal range (less than 6 percent), the lower your chances of complications. However, you increase your risk of hypoglycemia, especially if you have type 1 diabetes. Talk with your health care provider about the best goal for you

.....American Diabetes Association



MID-LIFE OBESITY MAY RAISE DEMENTIA RISK

Overweight women especially vulnerable, researchers find

The most convincing research so far suggests that being fat in your 40s might raise your risk of developing dementia later in life.

In a study that followed more than 10,000 Californians for almost 30 years, researchers found that the fatter people were, the greater their risk for Alzheimer's disease or other forms of dementia. The results were published online Friday by the British Medical Journal.

"This adds another major reason for concern about the obesity problem and it now unfolds yet another area where ... we have to say, 'for God's sake, we better get cracking,'" said Philip James, an obesity expert who was not connected with the research and who heads the International Obesity Task Force.

The study data showed that roughly 7 out of 100 normal-weight people developed dementia. Among overweight people, the risk was almost 8 out of 100; and for obese people, it was 9 out of 100.

This latest research comes amid questioning and confusion in the United States over the dangers of being overweight. Last week, the U.S. Centers for Disease Control said a new analysis showed that being too fat caused far fewer deaths than previous government estimates. The announcement led to attacks by critics and restaurant-funded groups who say the threat of fat has been hyped by the U.S. officials.

Funded by the U.S. National Institutes of Health, the California study was conducted by the Kaiser Permanente Medical Foundation. The project followed 10,276 people, in their early to mid-40s, for an average of 27 years. They had detailed health checkups from the mid-1960s to early 1970s.

Between 1994 and 2003, dementia was diagnosed in 713, or about 7 percent, of the study volunteers. The scientists examined links between dementia and obesity using two different measurements — body-mass index and the thickness of skin folds under the shoulder blades and under the arm.

Adjusting for conditions such as diabetes, heart disease and other factors, the study found a higher risk of dementia for heavy people. Using the body-mass index, which measures height and weight to classify how fat people are, obese people were 74 percent more likely to develop mind-robbing dementia than normal weight people. Overweight people were 35 percent more likely to develop it.

Effect worse for women

The effect was more profound for women than men. Obese women were twice as likely as women of normal weight to

develop Alzheimer's disease or other types of dementia, while for men the risk increased by 30 percent.

However, when the researchers used skin-fold thickness, instead of the body-mass index, to measure obesity, there was no difference between the men and women; both were up to 70 percent more likely to develop dementia if they had a thick fold between the tweezers than if they had a thin fold of skin on the test. And the thicker the skin fold, the higher the chance of later dementia, the study found.

Perhaps the most impressive aspect of the study, according to James, is that the researchers eliminated the influence of heart disease, diabetes and other conditions that might be the real culprits in dementia.

"We really adjusted for everything under the sun that is related to dementia. We brought in stroke, high cholesterol, hypertension, diabetes, heart disease — everything that has been implicated — and yet we still found this effect," said the study's leader, Dr. Rachel Whitmer, gerontological epidemiologist at the Kaiser Permanente Medical Foundation. "That suggests that there's another pathway — it's not just that being overweight raises the risk of heart disease and diabetes and that's why these people get dementia."

Reason for increased risk unclear

The study was not able to explain how obesity might increase the risk of dementia, but does propose several theories.

One is that fat cells are known to produce harmful, inflammatory chemicals, and there is evidence that these may cross into the brain.

James suggested a dietary lack of the right kinds of fatty acids, such as those found in fish, might also be a factor.

"It's been shown that the Western societies are short of fatty acids of this type," he said, adding that obese people "will be very deficient in these long-chain essential fats, which are known to be fundamental for brain development."

Scientists are studying whether fish oil supplements can prevent dementia.

.....msnbc



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 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 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.

.....thirdage



EFFORTS
Suite D
239 NE US HWY 69
Claycomo, Mo. 64119 •