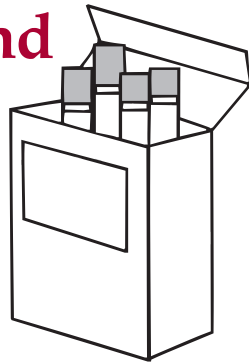


Smoking Time and Amount Boost Stroke Risk



Here's some weighty news for heavy smokers: Your risk of stroke hinges as much on how many cigarettes you puff a day as on how many years you light up, new study shows.

"It matters both how long you smoked and how much you were smoking at the time," says researcher Sachin Agarwal, MD, MPH, a postdoctoral fellow in cardiovascular medicine at Johns Hopkins Hospital in Baltimore, Md.

A person who smokes two packs a day for 10 years, in other words, faces the same risks as a person who smokes one pack a day for 20 years, he says.

Previous studies have shown that five to 15 years after kicking the habit, former smokers' stroke risk drops to that of people who have never taken a puff. But those studies generally considered only how much time had passed and not how many packs of cigarettes a person smoked each day, he says.

"For new smokers, the message is, if you can't stop, take a good look at how much you are smoking," Agarwal tells WebMD.

Larry B. Goldstein, MD, director of the Duke Center for Cerebrovascular Medicine at Duke University in Durham, N.C., and an American Heart Association spokesman, agrees. "People who can't quit should at least smoke as little as possible," he says.

Predicting Stroke Risk

The new study, presented here at the International Stroke Conference 2006, included a total of 42 men and women; 15 of them had never lit up and 27 of them were former smokers.

The 27 former smokers had quit an average of 30 years previously. Their average smoking exposure over their lifetime was 20 pack-years, which was cal-

culated by multiplying the number of years smoked by the number of packs smoked daily.

Then, the researchers used magnetic resonance imaging (MRI) to compare the thickness of the walls of the carotid arteries of the former smokers and the "never" smokers. Carotid arteries are important blood vessels that supply oxygenated blood to the brain. It is your carotid artery that you feel when you check your pulse at the side of your neck.

Atherosclerotic plaque can build up in one or both of the neck arteries, which can increase your risk for stroke. By measuring thickening of the walls of the carotid arteries, researchers can measure the amount of plaque buildup, Agarwal explains.

"Many studies have shown that atherosclerosis, as assessed by increased thickness of the carotid artery wall, is directly predictive of an increased risk of heart attack or stroke," he says.

The MRI images showed that carotid wall thickness increased progressively, depending on how many pack-years a person smoked.

The bottom line, Agarwal says, "is that pack-years are the more important predictor of stroke risk."

Benefits of Quitting

So should longtime heavy smokers give up all hope of ever getting their health back? "Definitely not," Goldstein tells WebMD.

No matter how long you smoked and how much you smoked, "there are numerous health benefits to stopping, from a lower risk of stroke to a lower risk of cancer," he says. Plus, parents who puff away should always keep in mind what they are doing to their kids, he says.

"Parents who smoke are poisoning their children," says Goldstein, pointing to the known risks of secondhand smoke.

"There's nothing worse than passing a car in which the kids are strapped safely in their safety seats, but the vehicle is filled with smoke," he says.



Spring Allergy Tips

With spring rains, there's more mold growth inside and outside your home. Flowers, trees, weeds, and grasses also begin to blossom. And spring cleaning will stir up dust mites throughout the house.

Keep pollen under control.

Wash bedding every week in hot water. Wash your hair and shower before going to bed, since pollen can accumulate in hair.

Clean every surface.

Wear a mask and gloves when cleaning, vacuuming, or painting to limit dust and chemical exposure. Vacuum twice a week.

Wash rugs.

Limit throw rugs to reduce dust and mold. If you do have rugs, make sure they are washable.

Keep indoor air clean.

Keep windows closed to reduce pollen entering the house. Change filters in air conditioning units and vents frequently this time of year.

Consider allergy medicine.

Talk to your doctor about seasonal allergy medication that may be appropriate for your symptoms.

Sleep Length May Sway Diabetes Risk

Too Much or Too Little Sleep May Raise Risk of Developing Diabetes

Skimping on sleep or overindulging in sleep might make diabetes more likely.

A study in *Diabetes Care* shows men who got little sleep (up to five or six nightly hours) or a lot of sleep (more than eight hours per night) were more likely to develop diabetes than men with moderate amounts of nightly sleep.

The study included more than 1,100 middle-aged and elderly men living in and around Boston. The researchers included H. Klar Yaggi, MD, MPH, of Yale University's medical school.

Getting too much or too little sleep could be a risk factor for diabetes, Yaggi's team reports.

Sleep and Diabetes

When the study started in the late 1980s, none of the men had diabetes.

They provided blood samples and were interviewed about their health habits, including their average hours of nightly sleep. Follow-up interviews were done in the mid-1990s and in 2002-2004.

Ninety new cases of diabetes were diagnosed during the study.

"Generally, those at the extremes in sleep duration [up to five hours and more than eight hours of sleep per night] had a worse risk profile in terms of diabetes risk than those who reported seven hours of sleep per night," Yaggi and colleagues write.

They took into account other factors that boost diabetes risk. Even so, nightly hours of sleep mattered.

Seven Hours Ideal?

Seven hours of nightly sleep might be ideal for taming diabetes risk, the study suggests.

Compared to men who slept for seven hours per night, diabetes risk was twice as high for men reporting little nightly sleep (less than five or six hours) and three times as high for men reporting lots of sleep (more than eight hours per night).

Think of Goldilocks, the fictional character from fairy tales. She hunted for a bed that wasn't too hard or too soft, and for porridge that wasn't too hot or too cold. The "just right" level was Goldilocks' goal, and if Yaggi's study is right, seven hours of sleep might be "just right" for lowering diabetes risk.

However, Yaggi's study doesn't prove that sleep habits caused (or prevented) diabetes in any of the men. Men reporting seven hours of nightly sleep also tended to be younger, more educated, in better health, and had higher testosterone levels, the study shows.

They add that the effects of sleep on diabetes risk may be mediated by changes in testosterone. Other studies have shown that low testosterone has been associated with risk factors for diabetes including obesity, body fat distribution, and insulin resistance.



Understanding Oxygen Therapy

How It Works

Normally when you breathe in, oxygen enters your lungs and goes into your bloodstream. With oxygen therapy, you breathe in concentrated oxygen to increase the amount of oxygen that enters your blood and, ultimately, your body's cells.

Oxygen therapy may be given using several delivery systems, including air concentrators, oxygen-gas cylinders, and liquid-oxygen devices. Oxygen therapy is usually portable, and you can use it while doing daily tasks.

- Concentrators, which take oxygen from the air, are the least expensive but are electrically powered and are fairly heavy [about 30 lb(13.61 kg)]. This makes them difficult to carry.
- Cylinders of compressed or pressurized oxygen gas come in several sizes. The largest are too heavy to move around. Smaller cylinders can be carried and provide about 5 hours of oxygen.
- Liquid oxygen is more expensive than compressed oxygen gas, but the containers weigh less, contain more oxygen, and are more convenient to use. Liquid oxygen, however, is more flammable and potentially more hazardous.

Oxygen can be given using a flexible plastic tube inserted in the nostrils (nasal cannula), a face mask, or a tube inserted into the windpipe (transtracheal cannula).

- The nasal cannula gives you the greatest freedom for moving around and talking. However, this method may be more expensive than other devices because of oxygen lost to the air. The amount of oxygen actually inhaled may be less than with other methods of delivery.
- A face mask is less portable and gets in the way of talking and eating.
- The transtracheal cannula requires making a small opening in the neck that leads to the windpipe (tracheostomy). The transtracheal cannula is not as easily seen, wastes less oxygen, and does not dry out the nose (which can occur with a nasal cannula). A transtracheal cannula requires more care and has a greater risk for infection.

Selecting the type of oxygen supply should be based on your ability to move around. People who seldom leave the house may find that an oxygen concentrator gives the best combination of convenience and cost.

In all oxygen delivery systems, the risk of fire or explosion is high if you use oxygen around lit cigarettes or an open flame. If you or those who care for you smoke, oxygen therapy may not be a good option.

Why It Is Used

Your doctor will determine how much oxygen you need with a blood test called arterial blood gas and another test called oximetry. These tests measure the levels of oxygen in the blood.

Long-term oxygen therapy is given to people with heart failure who have low levels of oxygen in their blood. It is given to increase the amount of oxygen in the blood to provide for the body's needs.

Oxygen therapy can decrease shortness of breath and allow you to do more.

How Well It Works

Oxygen therapy helps reduce the heart's workload. In heart failure, the heart does not pump as effectively as it should and does not meet the body's needs for oxygen. Oxygen therapy helps compensate by increasing the amount of oxygen delivered to the body's tissues.

Research shows that home oxygen therapy can help decrease shortness of breath and increase your capacity to exercise.

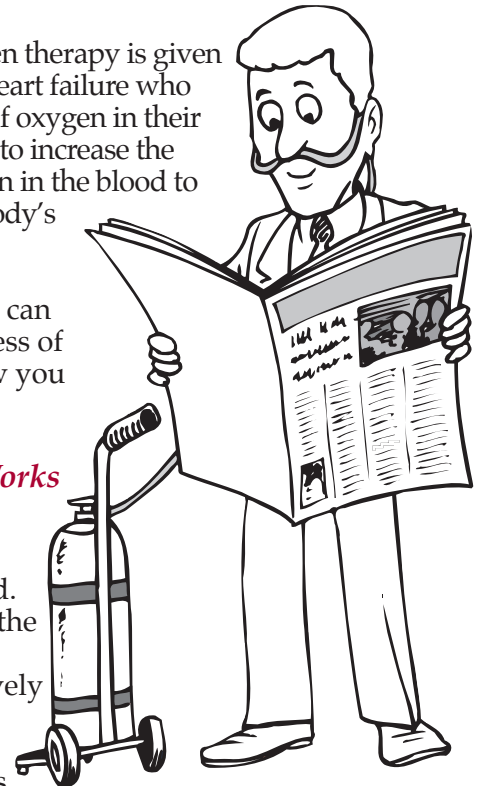
Side Effects

Generally, there are no adverse effects from oxygen therapy.

Your doctor will set the flow rate per minute to give you the right amount of oxygen. Don't change the flow rate unless your doctor tells you. Higher flow rates usually do not help and can increase the risk of harmful carbon dioxide buildup in the blood, especially in those people who also have lung disease.

What To Think About

There is a high risk of fire or explosion if you use oxygen around lit cigarettes or an open flame. Put up no-smoking signs in your home. If you or others



who care for you smoke, oxygen therapy may not be a good option because of this danger. Stay at least 5 ft (1.5 m) away from gas stoves, candles, lighted fireplaces, or anything that produces sparks.

Oxygen is usually delivered by a small plastic tube called a cannula. The cannula is placed under the nostrils and wrapped around your ears. To prevent your nose and cheeks and the skin behind your ears from becoming irritated, tuck some gauze under the tubing and use a water-based lubricant on chafed areas.

Oxygen can also be delivered through a face mask or oxygen tent or by a number of other devices.



Sleep-Related Breathing Problems Linked to Heart Disease

For millions of people with sleep-related breathing problems, getting a good night's sleep is an elusive dream. Even those with mild to moderate forms of the common condition called sleep apnea may experience chronic snoring, frequent morning headaches, and debilitating daytime fatigue. Sleep Apnea is a sleep disorder that causes a person to stop breathing while asleep. Sleep Apnea occurs due to an obstruction of the airway or a central nervous system dysfunction. Now a new study suggests that these people also are at increased risk for heart attacks, stroke, and other cardiovascular events, just like those with more severe sleep-related breathing problems.

According to the study, even those with mild to moderate respiratory events during sleep had a twofold higher risk of heart failure. The findings from the National Heart, Lung, and Blood Institute-funded Sleep Heart Health Study Research Group also showed that these individuals were at 1.5 times the stroke risk of those with no sleep-related breathing problems.

"Approximately three-fourths of the participants in this study had mild to moderate sleep disorders," lead author Eyal Shahar, MD, tells WebMD. "Only about 5% had symptoms severe enough to be considered severe sleep apnea. Most had few or no symptoms. Sleep-disordered breathing is something that affects most of

us in some way or another. We have shown that even when it is mild, it could have health consequences."

Some 12 million Americans are believed to suffer from sleep apnea, a disorder characterized by brief interruptions of breathing during sleep. Many more may have less severe sleep-disordered breathing problems that go unrecognized and undiagnosed. The sleep disturbances are most common in men and in those who are overweight, but they can occur in anyone at any age.

"The vast majority of people with this disorder are never diagnosed," American Sleep Apnea Association president Safwan Badr, MD, tells WebMD. "Many of these people have no symptoms at all and would be surprised to find they have sleep-related breathing problems that may be affecting their health." Badr, a professor of medicine at Wayne State University in Detroit, reviewed the study for WebMD.

Several recent studies have shown that people diagnosed with severe sleep apnea are at increased risk for high blood pressure and other cardiovascular events, such as stroke and heart attack. But little is known about the risk for people with mild breathing disorders during sleep.

In this study, published in the January issue of the *American Journal of Respiratory and Critical Care Medicine*, Shahar and colleagues assessed sleep-disordered breathing and self-reported cardiovascular disease events in roughly 6,500 people who were over the age of 40. Sleep patterns were recorded at home by study participants, during a single night, using a portable monitor.

The majority of participants had mild to moderate disordered breathing during sleep, averaging more than four events per hour. A total of 1,023 (16%) also reported at least one cardiovascular event, ranging from heart attack, angina, and heart failure to stroke, bypass surgery, or angioplasty. The researchers found that sleep-disordered breathing was most strongly linked to heart failure and stroke. Study participants with five or more respiratory episodes per hour had a slightly higher risk of heart disease, compared to those with no sleep-related respiratory problems.

"This finding suggests that the link between coronary heart disease and sleep disorders may not be as great as previous studies indicate," Shahar says. "Our study design makes it hard to draw firm conclusions, but we plan to continue studying this group for at least the next four years in [another] study."

Sleep patterns will be monitored once again, and the 6,000-plus participants will continue to be followed for coronary events. When that study is complete, Shahar says, more definitive conclusions can be made regarding the association between sleep-disordered breathing and cardiovascular disease.

But Badr says that people who suspect they have a breathing-related sleep disorder should not wait for more studies to seek a diagnosis or treatment.

“The association between these sleep disturbances and cardiac events like high blood pressure and stroke is not unexpected,” he says. “We have to search for this disease and not wait for those with the most severe cases to come to us. There are lifestyle changes and treatments that can make a difference, even for those with mild sleep disturbances.”

WebMD



Red Wine May Guard Against Lung Cancer

Red wine drinkers may get some added protection against lung cancer. However, that's not necessarily a green light to indulge, say researchers. The relationship between alcohol and health is hazy, with conflicting reports on a variety of conditions. Some experts report benefits; others highlight risks. And of course, drinking to excess has a host of health risks.

A study, which appears in the journal *Thorax*, looked specifically at consumption of red wine, white wine, and rosé wine (which is about midway between red and white wine), as well as beer and liquor on the risk of lung cancer.

There were 140 lung cancer patients in the study and 187 people who did not have lung cancer. All were at the same hospital for lung cancer treatment or minor surgery. Nearly 90% were men aged 62 or older.

Participants filled out questionnaires about topics including their jobs, smoking habits, and how much they drank of each beverage. Ideally, experts like to verify such reports, but that wasn't possible in this case.

Nondrinkers accounted for 25% of the cancer patients and 21% of the group without cancer. Drinkers in both groups said they consumed between three and four glasses of wine a day, with red wine ranking higher in popularity than white or rosé wine.

Because the researchers wanted to focus on the ef-

fects of each particular type of wine, they excluded 43 participants who said they didn't favor one kind of drink over the others.

Drinking red wine was associated with a reduced risk of developing lung cancer. In addition, red wine's protective effects appeared to increase with each glass.

White wine didn't fare as well. There was a "statistically significant association" between white wine consumption and developing lung cancer, say the researchers.

"In terms of the daily number of glasses, white wine appeared to increase the risk... Consumption of red wine, on the other hand, was associated with a slight but statistically significant reduction in the development of lung cancer," they write.

Red wine was associated with a 57% lower risk of developing lung cancer in people who drank it when compared with people who did not drink at all. In addition, the study showed that each daily glass of red wine reduced the risk of developing lung cancer by 13%.

Beer and liquor had no clear effects on lung cancer development.

The results remained intact after factoring in other risks associated with the development of lung cancer such as smoking, occupation, and total alcohol consumption.

Key Ingredients in Red Wine

Two components of red wine might be at work. Compared with white and rosé wine, red wine has higher proportions of tannins, which have antioxidant powers, and resveratrol, which may help fight tumors. That could explain red wine's advantage, say the researchers.

Still, they're not ready to raise a toast just yet.

"From a public health standpoint, we feel that these results should be approached with caution as it would be extremely risky -- and even dangerous -- for recommendations to be drawn up endorsing a high consumption of red wine for the prevention of lung cancer in light of the well-known association between alcohol consumption and increased mortality," they write.

The best way to avoid lung cancer is to quit smoking, since the researchers cite studies that show 85%-90% of all lung cancers are related to tobacco use.

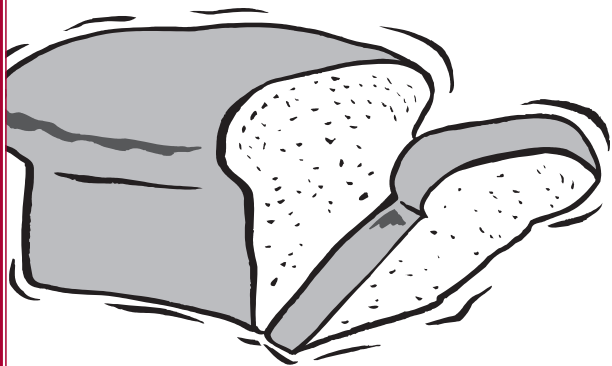
The goal of *LINCARE News* is to share timely information with clients of *LINCARE*. The contents are selected to provide guidelines for approaching the resolution of problems, but are not intended to provide medical advice for individual problems. The latter should be obtained from your physician.

Courtney Swift, Editor

BANANA BREAD

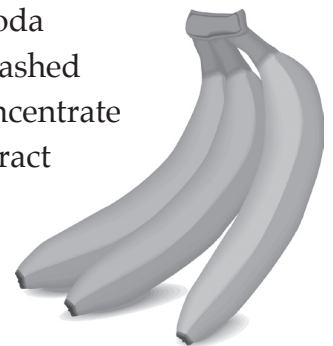
yield: 9 x 5 x 3-inch loaf (10 servings)

This quick bread is perfect for snacks, even breakfast.



Serving size 5 1 slice (1/10 pan)
204 calories 0.1 grams saturated fat
0.7 grams total fat 0 milligrams cholesterol

- 2 cups unbleached all-purpose flour
- 1/2 cup whole wheat flour
- 1 tablespoon baking powder
- 1/4 teaspoon baking soda
- 4 very ripe bananas, mashed
- 1/2 cup apple juice concentrate
- 2 teaspoons vanilla extract
- 1/2 cup raisins
- 3 egg whites
- 2/3 cup water



Preheat the oven to 350F. Mix all dry ingredients together. In a separate bowl, combine all the wet ingredients. Fold the dry ingredients into the wet ones. Do not overmix or the bread will not rise. Pour the batter into a 9 x 5 x 3-inch nonstick loaf pan or one that's been sprayed with vegetable oil. Bake for 1 hour. Cool, slice, and serve.