

Statistics in the News

OF HUMAN INTEREST | Benefits of Vitamin ZZZZZ

Study: More sleep helps ward off colds

By Carla K. Johnson
Associated Press

CHICAGO — Fluff up the pillows and pull up the covers. Preventing the common cold may be as easy as getting more sleep.

Researchers paid healthy adults \$800 to have cold viruses sprayed up their noses, then wait five days in a hotel to see if they got sick. Habitual eight-hour sleepers were much less likely to get sick than those who slept less than seven hours or slept fitfully.

"The longer you sleep, the better off you are, the less susceptible you are to colds," said lead author Sheldon Cohen, who studies the effects of stress on health at Pittsburgh's Carnegie Mellon University.

Prior research has suggested that sleep boosts the immune system at the cell level. This is the first study to show small sleep disturbances increasing the risk of getting sick, said Dr. Michael Irwin, who researches immune response at the University of California, Los Angeles, and was

not involved in the study.

"The message is to maintain regular sleep habits because those are really critical for health," Irwin said.

During cold season, staying out of range of sneezing relatives and co-workers may be impossible. The study, which appeared Monday in the Archives of Internal

Medicine, mimicked those conditions by exposing participants to a common cold virus — rhinovirus — and most became infected with it.

But not everyone suffered cold symptoms.

The people who slept less than seven hours a night in the weeks before they were exposed to the virus were three times more likely to catch a cold than those who slept eight hours or more.

To find willing cold victims, researchers placed ads and recruited 78 men and 75 women, all healthy and willing to go one-on-one against the virus. They ranged in age from 21 to 55.

First, their sleep habits were recorded for two

weeks. Every evening, researchers interviewed them by phone about their sleep the night before. Subjects were asked when they went to bed, when they got up, how much time they spent awake during the night and whether they felt rested in the morning.

Then they checked into a hotel where the virus was squirted up their noses. After five days, the virus had done its work, infecting 135 of the 153 volunteers. But only 54 people got sick.

Researchers measured their runny noses by weighing their used tissues. They tested for congestion

by squirting dye in the subjects' noses to see how long it took to get to the back of their throats.

Sleeping fitfully also was tied to greater risk of catching a cold. Those who tossed and turned more than 8 percent of their time in bed were five times more likely to get sick than those who were sleepless only 2 percent of the time.

Surprisingly, feeling rested was not linked to staying well. Cohen said he's not sure why that is, other than feeling rested is more subjective than recalling bedtime and wake-up time.

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Study finds link between cell phones, tumor risk

■ Long-term cellular users were more likely to develop a rare brain ailment, Swedish researchers find.

South Florida Sun-Sentinel

FORT LAUDERDALE, Fla. — People who have used cell phones for at least 10 years may have an increased risk of developing a rare brain tumor, according to a study published Wednesday in the international journal Epidemiology.

A team of researchers at Institute of Environmental Medicine at the Karolin-

ska Institute in Stockholm, Sweden, found almost a four-fold increase of the tumors — known as acoustic neuromas — on the side of the head where the phone was most often held.

The work was done as part of the World Health Organization's cell phone research agenda, and experts in the field said it must be taken seriously and

is likely to rekindle consumer worries about the risks of using the phones.

"The Karolinska researchers are respected around the world, and this study will force health agencies to take a fresh look at mobile phone risks," said Louis Slesin, publisher of Microwave News, who has been covering the industry since its early days. "This study should put an end to the industry's call to stop mobile phone health research."

At least one past study conducted for the cell phone industry also had sug-

gested a link between the phones and this type of tumor. But cell phone industry officials on Wednesday said the Swedish research is just one study and no conclusions can be drawn from it.

The study, involving 150 acoustic neuroma patients and 600 healthy people, is one of at least six studies that have investigated possible links between cell phone use and acoustic neuromas. Most of those studies had fewer long-term users than the Karolinska study.

10/14/04

Study: Walking helps women

■ Moderate exercise is found to reduce risk of heart attack, stroke as much as running.

By David Brown
The Washington Post

Walking is as good as running when it comes to reducing a middle-aged woman's risk of suffering a heart attack or stroke, according to the results of a large study sponsored by the federal government.

Brisk walking for about 2½ hours a week or an equivalent amount of more strenuous exercise cut the risk of heart disease and stroke by about one-third, the researchers found after tracking about 74,000 women for six years.

The results suggest that the benefits of exercise are within reach of virtually every American woman and don't require equipment, organized sports or painful exertion.

"No pain, no gain is an outdated notion," said JoAnn E. Manson, chief of preventive medicine

at Brigham and Women's Hospital in Boston and the lead author of the study, which appears in today's New England Journal of Medicine. "Exercise doesn't need to be strenuous or uncomfortable — moderate exercise will provide the lion's share of the health benefit."

Gerald Fletcher of the American Heart Association said the findings are important because in effect they lower the bar on a major public health hurdle — the effort to reverse the epidemic of inactivity in the United States.

"Everybody needs to do something," said Fletcher, director of preventive cardiology at the Mayo Clinic branch in Jacksonville, Fla. "But a lot of people don't want to because they believe they have to exercise hard, have to mess up their hair. But they can do moderate exercise, and enjoy it to some degree, and still get benefit."

The study doesn't discount the possibility that women who engage in very high levels of exercise — training for marathons or triathlons, for example — don't see even bigger gains in cardio-

vascular health.

"That is highly plausible," Manson said. She said the study, despite its size, had too few endurance athletes to address the question.

What it does suggest, however, is that there's a threshold of benefit that is fairly easy to reach. The biggest health gain, Manson said, comes when a person moves from a sedentary lifestyle to one that includes moderate, regular exercise.

The research is part of the federal government's massive Women's Health Initiative, which is studying numerous health questions important to women after menopause.

Earlier this summer, the initiative announced that women randomly assigned to take pills containing estrogen and progesterone had higher rates of cancer and heart disease than women who took placebo pills —

a finding expected to have profound effects on the popularity of hormone replacement therapy.

The exercise part of the study was purely observational; it did not involve assigning women to do one thing or another. The participants, between ages 50 and 79 when the study began in the mid-1990s, filled out detailed questionnaires about their activity.

The number of heart attacks, strokes and new cases of angina was small — 1,551 in about 74,000 women observed for just under six years.

Women who walked about briskly for at least 2½ hours a week had 30 percent fewer "events" than women who did not exercise.

The study also discovered that sitting in a chair for at least 16 hours each day was itself a risk factor for heart disease and stroke, regardless of whether a person exercised or not.

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Chewing gum may help waistline, brain

Chomping keeps cravings for snacks in check and helps boost math scores, research suggests

Star news services

Two studies presented this past week as part of the Experimental Biology 2009 conference in New Orleans found benefits to chewing gum.

One study found that you might be able to cut down on snacking by chewing more sugarless gum, while another sup-

ported the idea that chewing gum boosts academic performance.

In the first study, people were offered a variety of snacks three hours after a standard lunch and were told they could eat as much of the snacks as they desired. One afternoon, the participants also chewed sugarless gum for 15 minutes each hour in the period be-

tween lunch and snack time. The other afternoon, gum-chewing was not allowed during that time.

The researchers found that people ate fewer snacks and shaved 40 calories off their in-between meal consumption when they chewed gum, compared with when they didn't.

The participants — 115 men and women 18 to 54 years old, all regular gum-chewers — said they generally didn't feel as hungry or as desirous of a sweet treat after

chewing the gum. They also reported feeling less drowsy at mid-afternoon than they did when they didn't chew gum.

The second study, conducted by researchers at Baylor College of Medicine, included 108 students, ages 13 to 16, who were assigned either to chew sugar-free gum during math class, while doing math homework and during math tests, or to refrain from gum-chewing. After 14 weeks, the students took a math test, and

their grades were assessed.

Those who chewed gum had a 3 percent increase in standardized math test scores and had final math grades significantly better than the other students'. Teachers observed that those who chewed gum seemed to require fewer breaks and sustained attention longer.

The studies were sponsored by the Wrigley Science Institute, part of the company that makes chewing gum.

Limiting 16-year-old drivers is linked to drop in deaths

2/26/05

■ 10-year study shows fatalities fell 13 percent when states restricted young drivers' permits.

By Elizabeth Williamson
The Washington Post

WASHINGTON — Total car crashes among the nation's youngest, most accident-prone drivers decreased sharply in the decade after most states enacted laws limiting their access to a driver's license, a new study shows.

Auto deaths involving 16-year-old drivers fell more than 13 percent between 1993 and 2003, a period when 46 states and the District of Columbia enacted graduated licensing laws that allow fewer 16-year-olds to drive, according to the study released Thursday by the Insurance Institute for Highway Safety.

Among 16-year-olds who have full driving privileges, the rate of fatal crashes hasn't fallen, and it remains higher than that of any age group.

Researchers said the difference between the two groups points to the effect of the new laws, which keep most 16-year-olds from receiving unrestricted licenses and which are intended to curb risky practices, such as carrying teenage passengers and driving at night.

State limits riders with new drivers

In Indiana, a 1999 law prohibits young drivers from transporting passengers for 90 days after getting their license unless a licensed driver 21 or older is in the vehicle. The law also imposes curfews in certain circumstances on drivers younger than 18.

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The study shows that "withholding a license is going to improve the crash picture among 16-year-olds," said Susan Ferguson, senior vice president for research at the institute and an author of the study. "That's a success story, because the fewer of them who drive, the fewer of them who die."

The higher crash and fatality rates for teenagers in their first year behind the wheel have prompted highway safety advocates to fight for laws that prevent them from driving unsupervised, at least until they turn 17.

Sixteen-year-olds are four times more likely than adult drivers to become involved in a crash and three times as likely to die in one, national statistics show.

Motorists are at the greatest risk during their first year of driving — with high speed, driver error and multiple passengers contributing to crashes, previous research cited by the Insurance Institute shows.

Although the rules vary by state, graduated licensing programs extend the learner's period the time that teenagers must drive with an adult in the car.

The first graduated licensing program was introduced in Florida in 1996. By 2003, 47 jurisdictions had such programs.

According to the study, 938 16-year-old motorists nationwide were involved in fatal wrecks in 2003 — more than 13 percent fewer than in 1993, when 1,081 died in such crashes. That is despite an 18 percent increase in the number of 16-year-olds in the nation, the study found.

At the same time, the percentage of fully licensed 16-year-olds declined — from 42 percent in 1993 to 31 percent in a decade.

Also striking, Ferguson said was a 39 percent drop in fatal crashes involving a 16-year-old driver carrying other teenage passengers.

"The probability of being in a crash increases with each additional (teenager) in the car," she said. The figures show that "there's a fundamental change in the way young passengers are being transported."

Scientists challenged by the north-south orientation of cattle

By Randolph E. Schmid *THE ASSOCIATED PRESS*

WASHINGTON — Talk about animal magnetism, cows seem to have a built-in compass.

No bull: Somehow, cattle seem to know how to find north and south, say researchers who studied satellite photos of thousands of cows around the world.

Most cattle that were grazing or resting tended to align their bodies in a north-south direction, a team of German and Czech researchers reports in today's issue of Proceedings of the National Academy of Sciences.

And the finding held true regardless of what continent the cattle were on, according to the study led by Hynek Burda and Sabine Begall of the faculty of biology at the University of Duisburg-Essen in Germany.

"The magnetic field of the Earth has to be considered as a factor," the scientists said.

This challenges scientists to find out why and how these animals align to the magnetic field, Begall said in an interview via e-mail.

"Of course, the question arises whether humans show also such a spontaneous behavior," she said, adding, what "consequences does it have for their health?"

The study sent Tina Hinchley, who with her husband, Duane, operates a dairy farm in Cambridge, Wis., to take a new look at an aerial photo taken of their farm a few years ago.

"The cows that were in the pasture were all over the place . . . about two-thirds were north-south," Hinchley said.

Two-thirds is close to what the researchers found in their look at 8,510 cattle in 308 pastures. In the study, 60 percent to 70 percent of cattle were oriented north-south, which Begall termed a "highly significant deviation from random distribution."

Hinchley stressed that one factor that must be considered is cow comfort.

"They don't like to get hot. Their body temperature is 102, and they are wearing black leather jackets, literally! If turning north-south would keep them cooler, they would stand that way."

"This is a surprising discovery," said Kenneth J. Lohmann of the biology department at the University of North Carolina. "Nothing like this has been observed before in cattle or in any large animal."

However Lohmann, who was not part of the research team, cautioned that "the study is based entirely on correlations. To demonstrate conclusively that cattle have a magnetic sense, some kind of experimental manipulation will eventually be needed."

Joseph L. Kirschvink of the California Institute of Technology said he wondered if fences could affect cattle orientation.

Passive alignment of animals to magnetic fields has been reported in honeybees and termites, he noted. It requires some type of special sensory organ to detect the magnetic field.

"If they have evidence suggesting that mammals are using magnetic fields to orient their movements, this is very cool," said Mark A. Willis, an associate professor of biomedical sciences at Case Western Reserve University in Cleveland.

Willis, who was not part of the research team, added, "We have only in the last few years begun to understand the mechanisms underlying magnetic field orientation in birds and other smaller animals."

Indeed, it's small animals that led to this study, Begall explained. They were researching the magnetic field effect on African mole-rats.