Valuable Vices

Researchers uncover the healthful side of hedonism

By KATHLEEN FACKELMANN

Sex, alcohol, and high-fat foods may help people live longer.

What?

That's right, new research suggests that—in some cases—this naughty trio may actually help people avoid heart disease, stroke, and live a longer life.

"So what do we tell our patients now?" asks an editorial in the Dec. 20-27, 1997 BRITISH MEDICAL JOURNAL (BMJ). "What we thought was bad for you may actually be good for you, but it may not be good to tell you in case you do it too much."

The purveyors of public health must now skirt the dangerous border between promoting healthful living and granting a license to overindulge.

Take sex. Sex for fun has long been linked with an array of health hazards. The Huli people of Papua, New Guinea, for example, employ celibacy experts to advise young men about the mortal dangers of sex. In India, young men believe that any loss of semen may cause a rash of health problems, including heart palpitations. In the United States, some male athletes still worry that sex the night before a competition may impair their performance.

Epidemiologist Stephen Frankel of the University of Bristol in England and his colleagues have a more positive outlook. Their study, detailed in the same issue of BMJ, suggests that an active sex life may protect a man's health.

The Welsh town of Caerphilly and five nearby villages provided 918 men between the ages of 45 and 59 for this study. The researchers gave the recruits a physical exam, and a trained interviewer asked each one about the frequency of sexual intercourse. The researchers then kept track of each recruit for 10 years.

During the study, 150 of the men died, 67 of them from heart disease. When the researchers ran a statistical analysis to see if there were a connection between sexual activity and the risk of death, they found something surprising. The risk of death from all causes was halved in men who reported the highest frequency of orgasm, compared to men with the least sexual activity. Most of that protection took the form of a reduction in the number of deaths associated with heart disease.

The study wasn't designed to figure out how sex exerts its protective effect, but Frankel offers a few plausible explanations. It may be that sexual activity protects a man from death simply by giving him a cardiovascular workout. On the other hand, men with a good sex life may lead happier, less stressful lives, he says.

Healthier men may have sex more frequently, but the analysis accounted for this possibility and still found a strong association between frequent sex and longevity. "One endearing explanation is that pleasure is actually health-giving," Frankel told SCIENCE NEWS.

This study is one of the few that looks at the health effects of frequent sex, Frankel says. The findings need to be confirmed by other research groups, he adds.

The research does not address the question of multiple sex partners or the importance of taking measures to avoid sexually transmitted diseases such as AIDS. For people practicing safe sex, though, the study does suggest a new twist on the usual public health message. "Most studies tend to find that people ought to start doing things they don't want to do," Frankel says. "It's quite unusual to have a finding which actually suggests that what men like to do is actually good for them."

Now consider alcohol, which has a long list of health hazards associated with its use.

Researcher Thomas O. Obisesan of Howard University Hospital in Washington, D.C., started out to test his hunch that alcohol somehow contributes to a blinding eye disease known as macular degeneration. He and his colleagues looked at data on more than 3,000 men and women who were 45 to 74 years old between 1971 and 1975; 184 had evidence of the disorder.

When the researchers ran a statistical analysis to see whether alcohol played a role in the disorder, they unearthed an unexpected finding—alcohol, particularly wine, seemed to protect people from macular degeneration.

Specifically, people who drank wine appeared 20 percent less likely to develop the disease than those who did not drink wine. They describe their findings in the January JOURNAL OF THE AMERICAN GERIATRICS SOCIETY.

Macular degeneration is the leading cause of blindness in adults over age 65. Once the condition is diagnosed, there is no cure, notes Toni P. Miles of the University of Texas Health Science Center at San Antonio. If further research confirms that moderate alcohol consumption can stave off the disorder, the findings would represent an important public health advance, Miles says.

This epidemiological study cannot explain how wine might shield the eye from macular degeneration. However, Obisesan says one hypothesis is that free radicals, highly injurious oxygen molecules, may damage the macula, the part of the eye responsible for central vision. Wine contains a substance called resveratrol that helps disarm free radicals.

"Red wine is a major source of [resveratrol] in the diet," Miles notes in an editorial that accompanies the report.

Another hypothesis holds that alcohol may ward off macular degeneration through its beneficial effect on the cardiovascular system. Some researchers believe macular degeneration is related to heart and vessel disease.

The evidence is now "massive" that alcohol can prevent some heart disease, according to epidemiologist Richard Doll

at the University of Oxford in England. Heart attacks occur when a blood clot lodges in a coronary artery already choked with atherosclerotic plaque. When blood flow to the heart is reduced or shut off, a heart attack can result.

Doll notes that alcohol boosts concentrations of HDL, the good cholesterol, and discourages the formation of blood clots. "You can't ask it to do much more," he says.

Doll, Michael J. Thun of the American Cancer Society in Atlanta, and their colleagues published a report on alcohol and the risk of death in the Dec. 11, 1997 NEW ENGLAND JOURNAL OF MEDICINE. Their study of 490,000 men and women in the United States indicated that drinkers reduce their risk of dying from cardiovascular disease by 30 to 40 percent.

Regular, moderate consumption of alcohol—from one to three drinks per day—seems to be the key to prevention of clots, says Doll, who wrote a review of research on alcohol and heart disease in the Dec. 20-27, 1997 BMJ. In contrast, people who drink large amounts of alcohol in a single binge appear to gain fewer advantages. The cardiovascular shield put in place by alcohol lasts about 24 hours, Doll says.

The experts remain well aware of alcohol's destructive side. Excessive alcohol use carries with it a risk of addiction, dementia, liver damage, and in some cases death. For some people, even a small amount of alcohol may trigger a slide toward excessive use.

Alcohol use can cause problems even for moderate drinkers. For example, older people who drink run a greater risk of falling and injuring themselves. In addition, the NEJM study found that, compared to nondrinkers, women who have just one alcoholic drink per day run a 30 percent higher risk of dying from breast cancer.

Such risks have put public health officials in a bind about what to recommend. In the past, experts simply prohibited alcohol use, citing its dangers. "You can't really say that now," Doll says. Yet an unrestricted okay might be taken as a message to go all out, a path that certainly presents many pitfalls.

"I believe people ought to know what the facts are," Doll says. He argues that people should take into account their age when thinking about alcohol use. For example, the risk of heart disease is small in people under 45. After 45, the heart benefits of alcohol start to kick in, Doll says. For the very old or frail, the possibility of falling must be considered. The risks and benefits of alcohol consumption will play out differently for each person, he says.

Finally, there's the prohibition on fatty foods.

The National Cholesterol Education Program, run by the National Heart, Lung, and Blood Institute, has recommended that all adults restrict the amount of total fat they consume to 30 percent of the calories in their diet. That admonition and others like it have left many people struggling with menu choices.

A new study may turn this conventional wisdom upside down. It suggests that a certain high-fat diet may actually be better for you than a low-fat diet.

Matthew W. Gillman of Harvard Medical School in Boston and his colleagues knew that studies of the Japanese have shown that fat in the diet protects against stroke. Such research had never been done in the United States, where the average person's diet is notoriously high in fat, Gillman notes.

To start their inquiry, Gillman's team studied data on 832 middle-aged men in the Framingham Heart Study, a long-running research project conducted in a suburb of Boston. The researchers had information on what each man had eaten during a 24-hour test period and could thus gauge the amount and types of fat in this sample of their diets. The team also knew that 61 of the men had suffered an ischemic stroke.

An ischemic stroke occurs when a blood vessel in the brain narrows or is completely blocked by a blood clot, causing brain cells to die and leading to paralysis, loss of speech, and other symptoms of stroke. The team ran a statistical analysis to see if they could find any link between dietary fat and ischemic stroke.

They discovered that diets high in total fat appeared to prevent stroke. Total fat includes saturated fat, found predominantly in meat and dairy products; polyunsaturated fat, found in fish and some vegetable oils; and monounsaturated fat, found in olive and canola oils.

Moreover, the relationship between total fat and ischemic stroke seemed to be dose-dependent. Every 3 percent increase in calories from total fat corresponded to a 15 percent reduction in the risk of stroke, the authors noted in the Dec. 24-31, 1997 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

The researchers found no significant link between dietary fat and the less common hemorrhagic stroke, which occurs when a vessel leading to the brain bursts. However, the study included just a few cases of this kind of stroke.

The group focused on the constituents of fat in the diet. They found no link between polyunsaturated fat and ischemic stroke. They also noted that saturated and monounsaturated fat did offer protection against such stroke.

Gillman suggests a reason for this benefit. Blood vessels incorporate fat into their walls to give them structural integrity. The first step in the process leading to a stroke is injury to the blood vessel wall. Any number of factors, such as the noxious chemicals in tobacco smoke, can cause that initial damage.

Gillman speculates that blood vessels which are low on fat may be prone to injury. Once the harm has been done, the blood-clotting system comes in to repair the damage. If that process goes too far, a clot can block off the vessel and cause a stroke. Studies in animals are needed to chart just how fat affects the blood vessels and the risk of stroke, he adds.

"Our study raises a lot of questions," Gillman admits. One is whether the U.S. guidelines for fat intake may actually increase the risk of ischemic stroke.

The findings don't mean that it's okay to pig out on ice cream. Saturated fat promotes atherosclerosis, the buildup on artery walls that can lead to a heart attack. "It's still good individual eating practice to reduce saturated fat in the diet," Gillman says. However, he and many other dietary researchers believe that monounsaturated fat doesn't hurt—and probably helps—a person's overall health profile.

Gillman's data support the so-called Mediterranean diet, which includes grains, fruits, vegetables, and fish and is high in mono- and polyunsaturated fats and low in saturated fat. Further evidence of the benefits of this diet comes from the island of Crete, notes Thomas R. Price of the University of Maryland School of Medicine in Baltimore, who wrote an editorial accompanying Gillman's study. People in Crete have traditionally eaten such a diet and have very low rates of heart disease and stroke, he told SCIENCE NEWS.

What does such research mean in real life? The findings about stroke suggest that people can have their cake and eat it too—as long as it's made with canola oil instead of butter. Many researchers agree that a Mediterranean-style diet, including a daily glass of wine, may offer the best shot at longevity.

As for the risk associated with alcohol, many physicians, including John D. Potter, author of an editorial accompanying the NEW ENGLAND JOURNAL OF MEDICINE study, seem to be coming around to Plato's advice on the subject: Nothing in excess.

That counsel may hold for diet and sex as well. □