

Short Articles on Laughter Healing ...

Laughter Is Good For Your Heart

Center for Preventive Cardiology, Maryland Medical Center (Year 2000)
Michael Miller, M.D.

Laughter, along with an active sense of humor, may help protect you against a heart attack, according to a new study by cardiologists at the University of Maryland Medical Center in Baltimore. The study, which is the first to indicate that laughter may help prevent heart disease, was presented at the American Heart Association's 73rd Scientific Sessions on November 15 in New Orleans. The researchers found that people with heart disease were 40 percent less likely to laugh in a variety of situations compared to people of the same age without heart disease.

"The old saying that 'laughter is the best medicine,' definitely appears to be true when it comes to protecting your heart," says Michael Miller, M.D., F.A.C.C., director of the Center for Preventive Cardiology at the University of Maryland Medical Center. "We don't know yet why laughing protects the heart, but we know that mental stress is associated with impairment of the endothelium, the protective barrier lining our blood vessels. This can cause a series of inflammatory reactions that lead to fat and cholesterol build-up in the coronary arteries and ultimately to a heart attack," says Dr. Miller who is also an associate professor of medicine at the University of Maryland School of Medicine.

In the study, researchers compared the humor responses of 300 people. Half of the participants had either suffered a heart attack or had undergone coronary artery bypass surgery. The other 150 were healthy, age-matched participants who did not have heart disease.

Note to Self: Put Laughter on Calendar Re: The Biology of Hope

Nov. 20, 2001 -- It's been said that laughter is the best medicine. But here's a new study showing that even *looking forward* to a good laugh -- simply by renting a funny video or checking out the TV comedy listings -- can be good for your health.

In the first study of its kind, researchers found that sheer anticipation of watching a funny video triggered significant mood changes, reducing levels of stress-related hormones and boosting disease-fighting immunity.

It's the "biology of hope" at work, says lead author Lee Berk, MD, assistant professor of family medicine at the University of California Irvine College of

Medicine. His findings were presented at the recent Society for Neuroscience meeting.

"We believe this 'biology of hope' underlies recovery from many chronic disorders," Berk says in a press release. "Treatments that take advantage of this hope may go a long way to stimulating immune responses and hasten recovery."

Berk and his colleagues have spent years focusing on the effect that moods have on the immune system and disease. They have established the role played by laughter in the body's ability to effectively fend off viruses and bacteria and help fight chronic diseases like cancer and heart disease.

Chronic stress can profoundly depress the immune system, says Berk. He has found in previous studies that exposure to a one-hour humorous video reduced secretion of stress hormones like epinephrine and cortisol and enhanced the anti-viral and antibacterial capabilities of the body's immune system.

However, this is the first study showing that anticipating an event can also trigger stress-relieving changes. In his study, Berk enrolled 10 men -- all around 27-years old -- and measured them for signs of stress. He also told them they would be watching a funny video in about three days. He found that in each of the men, their negative moods progressively lifted *before* they saw the video.

Two days before the video, mood ratings for depression dropped 51%, confusion 36%, anger 19%, fatigue 15%, and tension 9%. These ratings became increasingly dramatic immediately after watching the video; depression and anger dropped by 98%, fatigue by 87%, confusion by 75%, and tension by 61%. Each man also had more vigor -- an increase of 12% before the video and 37% afterward.

"While vigor actually shows signs of more energy and better resistance to disease, the other mood categories are known to increase stress hormone levels and reduce the effectiveness of the immune system," Berk says. "Positive anticipation of humor starts the ball rolling in a sense, in which moods begin to change in ways that help the body fight illness. We believe this shows that even anticipation can be used to help patients recover from a wide range of disorders."

Chronic Depression May Rob You Of More Than Joy: The Evidence Is Piling Up That It Can Also Steal Your Health

By Marianne Szegedy-Maszak
US News & World Report 2006

Bryce Miller's work as an industrial engineer in Topeka, Kan., wasn't a whole lot more challenging than the job he faces in retirement: engineering his own medical care by 10 different doctors. Miller, 74, sees a team of specialists, which

includes a cardiologist, a urologist and radiologist for prostate cancer, an endocrinologist for diabetes, a nephrologist for kidney problems, and a psychiatrist to manage the severe episodes of depression he has suffered during a long struggle with bipolar disorder. "I can't find a doctor who can handle all of it," he says. It's impossible to pinpoint all the causes of Miller's illness; a combination of bad genes, bad luck, and bad diet probably gets much of the blame. But lately, he says, he's been wondering whether his mental state may have played a role, too. Medicine has recognized for some time that chronically sick people are prone to depression and that those affected have a tougher road back. Now, the signs are mounting that the spectrum of depressive illness, and perhaps even bitter loneliness, may actually make healthy people more vulnerable to a range of physical ailments. "There is a growing body of evidence suggesting that depression might be a causal risk factor in diseases like ischemic heart disease, stroke, diabetes, and immune-based diseases like cancer and HIV/AIDS," says Dwight Evans, chair of psychiatry at the University of Pennsylvania medical school. "And there is also considerable recent evidence that mood disorders can affect the course of medical illnesses. It goes both ways. Depression may be both a cause and a consequence of medical illness."

Importance Of Oxygen

Laughter helps us keep healthy by enriching the blood with ample supplies of oxygen, the lifeline of our system. According to the science of yoga, life energy (prana) flows through the breath. Through controlled and deep breathing we can enhance our own well-being. With the 20-30 minute package offered by the Laughter Club, participants take home the healthy habit of deep breathing at least 10-20 times a day. This helps to increase the lung capacity, thus enhancing oxygen supply to the body.

Check out what the experts are saying on the importance of oxygen: "Deep breathing techniques which increase oxygen to the cell are the most important factors in living a disease free and energetic life... Remember. Where cells get enough oxygen, cancer will not, cannot occur." --Dr. Otto Warburg, President, Institute of Cell Physiology, Nobel Prize Winner (Dr. Warburg is the only person to ever win the Nobel Prize twice in medicine and he was nominated for a third.) "Breathing correctly is the key to better fitness, muscle strength, stamina, and athletic endurance." --Dr. Michael Yessis, Phd., President Sports Training Institute, Fitness Writer - Muscle and Fitness Magazine "Oxygenation through deep breathing boosts the immune system and can rid the body of chronic illnesses." --Dr. Sheldon Hendler, MD, Medical Researcher Cell Oxygenation, Author "The Oxygen Breakthrough," "All body functions are breathing related.

Proper oxygen delivery to all parts of your body is crucial to health and well-being. Aerobic exercise increases the body's available oxygen and therefore promotes wellness. Delivering oxygen to the body is the responsibility of the respiratory system. Breathing is the process by which air enters the bloodstream,

via the lungs. Thus, proper breathing, and correcting common breathing disorders, is the ultimate form of aerobics." --Dr. Robert Fried, *Breath Connection*, Insight Books, 1990, p. 52

"Oxygen tension in tissues enhances the action of some antibiotics — notably amino-glycosides — and the immune system, and stimulates cellular metabolism." --Linda Collison, *Hyperbarics: when pressuring patients helps*, Health Index
"Deep diaphragmatic breathing stimulates the cleansing of the lymph system by creating a vacuum effect which pulls the lymph through the bloodstream. This increases the rate of toxic elimination by as much as 15 times the normal rate." --Dr. J.W. Shields, MD, *Lymph, lymph glands, and homeostasis*. *Lymphology*, v25, n4, Dec. 1992, p. 147

"Oxygen plays a pivotal role in the proper functioning of the immune system. We can look at oxygen deficiency as the single greatest cause of all diseases." -- Stephen Levine, a respected molecular biologist and geneticist, and Dr. Paris M. Kidd, Ph.D., *Antioxidant Adaptation*
"Carbon dioxide is the most abundant of all the end-products of metabolism." --Arthur C. Guyton, M.D., *Textbook of Medical Physiology*, W.B. Saunders Company, p. 4

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Love and Laughter,
Grace