

Say "Om" Before Surgery

By **MEHMET OZ, M.D.**

In my work as a cardiovascular surgeon, I use the most sophisticated tools of modern medicine to separate patients from their diseased hearts and replace these organs with healthy ones. While my training was in the science of the Western world, I also rely heavily on an ancient Eastern technique—meditation—to help my patients prepare for surgery and to steer them gently toward recovery. Why? Because it works.

Every patient who comes to Columbia Presbyterian Medical Center in New York City for a heart operation is offered an optional program of massage, yoga and meditation. We sell specially prepared 90-minute audiotapes in which a calm voice speaks over gentle strains of New Age mu-

counteract the fight-or-flight response that floods the body with the stress hormone cortisol and that also shuts down the parasympathetic system, which normally restores order after the alert is over. At a molecular level, meditation slows metabolism in red blood cells and suppresses the production of cytokines—proteins associated with the kind of heightened immune response often seen in stressed-out subjects such as students taking exams.

If you have ever seen footage of Buddhist monks sitting in the Himalayan snow, warming cold towels draped over their shoulders and back with body heat generated by meditation, you have seen at work the power of the mind over the body. The monks can manipulate their metabolism to redirect the body's energy from warming its core to heating its surface; the

drop in internal metabolic rate is well documented. Similar results have been observed in studies of patients having surgery; patients who meditated experienced less operative bleeding than controls given placebos.

Meditation also reduces the impact of several peculiarly Western diseases. Studies have shown that meditation can reduce hardening of the arteries, especially in African Americans with high blood pressure. People suffering from anxiety disorders also appreciate the lowered stress, reduced

blood pressure and slowed heart rates associated with meditation. Similarly, there is growing evidence that a meditation program can have a positive, sustained effect on chronic pain and mood, including depression and anxiety. In an even more dramatic example, initial research has suggested that meditation combined with dietary changes may slow tumor progression in prostate-cancer patients.

Conventional medicine will keep breaking new ground in treatment and prevention, yet often the most effective solutions are found in the medicine cabinet of the mind. In one study, meditating 15 minutes twice daily reduced physician visits over a six-month period and saved the health-care system \$200 a patient. Sometimes the best things in life are free.

Dr. Oz is the director of Columbia Presbyterian's Heart Institute

HELPERS

promising is dietary supplementation with omega-3 fatty acids, the special fats found in oily fish such as salmon and sardines; in walnuts, soy, flax and hemp seeds; and in fortified eggs. One of the omega-3s, docosahexaenoic acid, or DHA, is the main constituent of cell membranes in the brain. Dietary deficiencies of DHA—probably the rule rather than the exception for most Americans—may be a factor in childhood autism, attention-deficit hyperactivity disorder, bipolar disorder and depression. Treatment of these conditions with supplements of omega-3 fatty acids is a promising area of mental-health research.

I am particularly enthusiastic about the value of omega-3s in the management of bipolar disorder; they may allow patients to reduce the dosage and side effects of conventional medications. Another possibility is that children who did not get enough of these fatty acids in utero or in infancy are more susceptible to mental and emotional problems. Encouraging pregnant women to increase intake of omega-3s in late pregnancy and during nursing might be a simple way to improve mental health in our society.

And what about St.-John's-wort and other herbal remedies? In my view, St.-John's-wort still needs to be properly tested in large populations for the relief of mild to moderate depression. Despite one brief study to the contrary, ginkgo biloba continues to look promising as a means of slowing age-related dementia and improving blood flow to the brain. And we have yet to test the many tonic herbs from China, Tibet and India that are said to enhance physical and mental health, extend longevity and resistance to stress, and promote general well-being. We have a lot of work to do.

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TED THAL FOR TIME

HIP POST-OP:
Heart patients at Columbia Presbyterian Medical Center contemplate the path to recovery

sic and urges patients to remember a place where they felt happy and comfortable. Americans tend to be very self-conscious about this sort of thing. Some patients don't even want to close their eyes. But surgery gives people an incentive to try new things, and a significant percentage of our patients take us up on our offer—to their benefit. We've done randomized trials in which some patients get tapes like these and others get sham mantras—meaningless scripts of random phrases. What we've discovered is that the words don't matter. The patients who do the best—in terms of managing pain and reducing anxiety—are the ones who use the tapes, real or sham.

What's going on? Several things at once, I suspect. At a hormonal level, studies have shown that meditation can