

EDWARD A. TAUB, MD '63

Prescribing Wellness

A decade into practice, Edward A. Taub, MD '63, had built the largest pediatrics practice in Orange County, California, caring for upward of 20,000 families. But something puzzled him: 80 percent of the "sick visits" were from the same 20 percent of patients. A chart review found that these weren't children with chronic conditions such as juvenile diabetes or leukemia, but recurrent, every day, common illnesses and problems.



In addition to his work in endothelial medicine, Dr. Taub is the ship doctor on a historic schooner, Curlew, in Dana Point, California, where he directs "Voyages To Wellness" for medical students and physicians to help prevent stress and burnout. "It's not just all right for physicians to be happy and healthy—it's imperative," he says.

When Dr. Taub began interviewing these families, he found a common thread. "Most of these children came from stressed-out families," Taub says, "and that stress was having an adverse affect on their health."

So he did something innovative—he invited 2,000 families to participate in a series of "wellness" office visits that focused on reducing stress—first by reassuring the children that they were loved, then by emphasizing healthful nutrition, outdoor exercise and the need to turn off the TV. He also taught mindful meditation to children as young as four years old, which was novel in 1975, even in California.

As families adopted these habits, their children by and large stopped getting sick. Taub was invited to present the results of his "clinical trial" at the Institute of Medicine in Washington, DC, introducing the field of Integrative Medicine,

what he calls "a biosocial and psychospiritual approach to health and healing."

Encouraged by polio vaccine pioneer Jonas Salk, MD, who called his approach "a vaccination for wellness," Taub left private practice to found the Wellness Medical Institute and devote his career to Integrative Medicine, a scientific and holistic approach to health and wellness.

He's written eight books (including one that was adapted into a PBS special), launched a wellness program for the Teamsters/AFL-CIO, and served as national spokesperson for the American Medical Association's "How to Quit Smoking Campaign" based on his own success rate with patients. He also spent 13 years as QVC's on-air wellness medical doctor, with his own shows broadcast to over 100-million homes, creating the world's largest wellness medical practice.

It wasn't always easy going. Initially, he was ridiculed by colleagues and his concepts opposed by the mainstream medical community. Three decades later, Integrative Medicine is taught in more than 80 medical schools and the original tenets Taub proposed are considered common sense. Despite the growing acceptance, Taub has worked steadily to legitimize his theories through science. "Too often, wellness is still looked at as being a California, Eastern medicine, New Age phenomenon," he says.

His quest to establish a more scientific foundation for Integrative Medicine led to collaboration with Ferid Murad, MD, PhD, who shared the Nobel Prize in Medicine in 1998 for discoveries concerning nitric oxide as a signaling molecule in the cardiovascular system. Their work resulted in identifying what Taub calls the "molecular basis for wellness." "If we have sufficient nitric oxide molecules in our body, then we tend to be healthy and well, and if nitric oxide molecules are under produced, then we tend to be sick and tired," he says.

"Virtually everything we do that's good for us increases nitric oxide. Conversely, virtually everything we do that's bad for ourselves—smoking, eating fatty foods, chronic worrying or anger, leading a sedentary lifestyle—decreases nitric oxide."

Taub and Murad published their conclusions in *The Wellness Solution* (World Almanac Press, 2007), co-authored with David Oliphant. Subsequent research turned Taub's focus from nitric oxide to the endothelium itself, which produces the nitric oxide molecules. Until recently, the lining of endothelial cells inside arteries, veins and capillaries was considered to be inert. "Now we know that our body's trillions of endothelial cells comprise a vital organ that is teeming with life and interfaces with all our other organs," he says. "By supporting endothelial health, we can increase the production of nitric oxide, thereby encouraging homeostasis and regulating entropy," he says.

After a decade of study, including the embryological development of the endothelium, Taub hypothesizes that not only is the endothelium the first organ to form in our body, but that it is the "mother" organ from which all other organs arise. Also, rather than the heart, he identifies the endothelium as our "life organ," since it creates nitric oxide molecules, which he calls our "sparks of life."

"Without nitric oxide molecules, blood vessels constrict, oxygen doesn't get to our cells and organs, and our cells and organs die," he explains. Thus, virtually every disease involves endothelial dysfunction—underproduction of nitric oxide molecules—either as the cause or as collateral damage, he says.

Taub's pursuit of endothelial biomedicine integrates a holistic approach with science. The ways to help keep the endothelium healthy—good nutrition, regular exercise, adequate rest, and stress reduction—are the same tenets to wellness that he has prescribed for years. "But now they can be readily understood within the context of the molecular biology of wellness," he says. "Many of us working in this new field believe identifying the endothelium as a vital organ will be the basis of many scientific breakthroughs in the future."

—Renée Gearhart Levy