

Promoting Cardiovascular Education, Research and Patient Care

CV Network

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Academy Established in China

by Ivan Berkowitz, Winnipeg, Canada



Dr. Naranjan Dhalla (L), Dr. Qi-de Han (C) and Dr. Rutai Hui (R)

Buoyed by the enthusiastic support of Dr. Qi-de Han, Vice-Chairman of The Standing Committee of The National People's Congress; Professor and Director, Institute of Cardiovascular Science of Peking University and Key Laboratory of Molecular Cardiology, Ministry of Education; President, Peking University Health Science Center; Vice-President, Peking University; and Fellow of the

IACS, the International Academy of Cardiovascular Sciences – China Section commenced on September 18, 2004. The President will be Dr. Rutai Hui, MD, Professor, Fuwai Hospital, Beijing. The Executive Secretary will be Dr. Xian Wang, PhD, Professor, Department of Physiology, Peking University Health Science Center, Beijing.

Dr. Naranjan Dhalla, Executive Director, and Ivan Berkowitz, Director of Development were delighted that their visit to China achieved the long-desired objective of adding China to Sections established previously in Japan, South America, India and Europe.

The occasion for their visit, Sept. 18 – 21, 2004, was the VIII Chinese Section Congress of the International Society for Heart Research



The Official Opening Ceremony in Weihai City

sented their work), as well as Youyi Zhang who did an extraordinary job as the General Secretary of the Organizing Committee.

Ivan Berkowitz delivered a talk on "Promotion of Heart Health" based on his lifetime of personal experience in Canada. Specifically, he stimulated interest in fund-raising programs to involve the public in China.

Prior to their visit to China, Naranjan Dhalla and Ivan Berkowitz visited the Institute of Cardiovascular Science and Medicine at the University of Hong Kong. With Tak-Ming Wong, Professor and Head; Man-Lung Fung, Associate Fellow; and Academy Fellows, Ricky Man and Paul Vanhoutte, plans were initiated for the Academy, through the China Section, to become a Partner of the Institute's Ninth Annual Scientific Meeting planned for December 2005 in Hong Kong. ❤️



left to right – Ricky Man, Masao Endoh, Rui-Ping Xiao, and Rutai Hui

in Weihai City.

The Academy was also represented by Fellows Paul Vanhoutte and Ricky Man from Hong Kong; Masao Endoh from Japan; Rui-Ping Xiao, National Institutes of Health, Baltimore, USA; and from China - Depei Liu, Junbo Ge, Guoqing Liu, Ding-Liang Zhu (he did not attend, but his colleague repre-

PEOPLE AND PLACES

Academy Participated in Brazil Congress

by Ivan Berkowitz, Winnipeg, Canada



Piero Anversa, Professor, Department of Medicine, New York Medical College, Valhalla, NY, USA

The 59th Congresso of the Society of Brazilian Cardiology attracted over 6,000 delegates in Rio de Janeiro, September 26 to 29, 2004.

The Official Opening, in a special ceremony, honoured Academy Fellow Dr. Edson Saad.

Many Fellows were featured Speakers at the Congresso including Piero Anversa, Professor, Department of Medicine, New York Medical College, Valhalla, NY, USA; Mario F. de Camargo Maranhão, Curitiba - PR, Brazil; Otoni Moreira Gomes, Belo Horizonte - MG, Brazil; Wagner C. Pádua Filho, Belo Horizonte - MG, Brazil; and Juarez Ortiz, Sao Paulo - SP, Brazil.

Raimundo Marques do Nascimento and Ivan Berkowitz participated in a unique symposium co-sponsored by SBC/FUNCOR (the Education Section of which Raimundo is Executive Director); InterAmerican Heart Foundation and the Academy. Raimundo reported on a major research pro-



Booth at the SBC Exhibition for CARDIOGLOBAL

gram underway in Brazil and Ivan's talk was "Promotion of Heart Health in Canada". The Chair was David P. Brasil.

There was an excellent booth in the SBC Exhibition for CARDIOGLOBAL. The 1st International Intensive Seminar on Cardiovascular Diseases was held in Ouro Preto – MG, Brazil, Oct. 13 – 15, 2004. The Academy was one of the Sponsors. ♥

PEOPLE AND PLACES

4th Annual Meeting of IACS Japan Section

by Makoto Nagano, Tokyo, Japan

The 4th Annual Meeting of the International Academy of Cardiovascular Sciences (27th Japanese Working Group for Cardiac Structure and Metabolism) was held on July 18-19th, 2004 at Senri Life Science Center/Osaka, Japan. Ryoji Matoba, MD, PhD, from Osaka University was the Chairman.

The Meeting was an impressive and highly successful gathering of scientists and clinicians presenting their latest findings. The meeting included 8 sessions, one invited lecture, 5 special presentations and 39 interesting presentations on apoptosis, cardiac remodeling, cardiac hypertrophy, myocarditis, cardiomyopathy, cardiac protection, angio-neogenesis and fatty metabolism.

As Invited Speaker, Prof. Toshio Yanagida, MD, PhD, Osaka University School of Medicine presented about the Single Molecule Nano-Bioscience. Special speakers were Prof. Seiryu Sugiura, Graduate School of Medicine, University of Tokyo and Prof. Hirotohi Tanaka, the Institute of Medical Science, the University of Tokyo. Dr. Sugiura reported about the development of the multi-scale, multi-physics heart simulator and Dr. Tanaka's research was about the molecular mechanisms for hypoxia-dependent gene expression, especially on the FIH-1. These lectures were very stimulating for us. All of these lectures were of very high quality and made a big impression on the participants.

Prof. Naranjan S. Dhalla, Executive Director of IACS, participated with his lecture "Role of Oxidative Stress in Subcellular Remodeling in the Ischemic-Reperfused Heart" and presented the Howard Morgan Award for Distinguished Achievements in Cardiovascular Research to Prof. Shunzo Onishi, MD, PhD, Pathologist, Graduate School of Medicine, and Faculty of Medicine, Osaka University. As Prizewinner, Dr. Onishi lectured about "Cell Injury, Adaptation and Death". ♥

Unique Award Presented by Academy

by Makoto Nagano, Tokyo, Japan

The Japanese Working Group on Cardiac Structure and Metabolism was founded in 1962 by Drs. Tachio Kobayashi (Chairman of the 8th ISHR World Congress in Tokyo), Yoshio Ito (Chairman of the 13th ISHR World Congress in Kobe) and five other cardiac researchers in Japan. At that time, this working group was a small closed meeting. In 1976, the meeting was opened to the universal basic and clinical cardiac researchers. Since then, Eisai Co, a Japanese representative pharmaceutical company, supported this working group. The group has published 24 monographs "Cardiac Structure and Metabolism". In 2001, the group changed its name to Japan Section, International Academy of Cardiovascular Sciences.

At IACS Japan Section meeting in July 2004, Osaka, Japan, Executive Director Prof. Naranjan S. Dhalla gave the Distinguished Service Award of the International Academy of Cardiovascular Sciences to President of Eisai Co, Mr. Haruo Naito, with many thanks for the long time support. ♥

2004 Howard Morgan Award Honors Shunzo Onishi

by Makoto Nagano, Tokyo, Japan



Drs. Makoto Nagano (left) and Naranjan Dhalla (right) presented the 2004 Howard Morgan Award for Distinguished Achievements in Cardiovascular Research to Professor Emeritus Shunzo Onishi, Osaka University.

During the 4th IACS Japan Meeting in Osaka, Japan in July 2004, Shunzo Onishi was presented by Naranjan S. Dhalla with the Howard Morgan Award for Distinguished Achievement in Cardiovascular Sciences from the International Academy of Cardiovascular Sciences.

Dr. Shunzo Onishi is Professor Emeritus, Cardiac Pathologist, Osaka University School of Medicine, Japan. Dr. Onishi was born January 24, 1938. His medical training took place at the Medical Faculty of Osaka University, Japan. In 1960, he became a MD after the national board examination for medical doctors. In 1964, he completed the Osaka University postgraduate medical school PhD. In 1964-1965, he was a lecturer. In 1966-1969 he was Wissenschaftlicher Assistant in the Pathological Institute of University Freiburg i.Br led by Prof. Dr. Dr. H.C. Franz Buechner, where he researched the ultra-structure of myocardium by electron microscopic method. In 1968 and 1970, he published with Prof. F. Buechner the monographs: *Das Herz bei acuter Koronarinsuffizienz im elektronen-mikroskopischen Bild*; and *Hypertrophie und Herzinsuffizienz aus der*

Sicht der Elektronenmikroskopie, Verlag U. & S., Muenchen-Berlin-Wien. Later, he frequently visited Germany to work in Aschoff-Haus in Freiburg.

In 1971, he participated in the 5th World Congress of the International Study Group on Cardiac Metabolism (now the International Society for Heart Research) in the USA and since then he is a member of ISHR. He is a Founding Fellow of ISHR.

In 1969, he returned from Germany to join the College of Biomedical Technology, Osaka University as Associate Professor, and in 1980, he served as Professor of this College and in 1993 he became Professor and Director of School of Allied Health Sciences, Faculty of Medicine, Osaka University. In 1970, he began studying for the first time in the Japan Cardiomyopathic Syrian Hamster BIO 14.6, which he had been given by Prof Bajusz, Canada. Since then, he has researched about this Cardiomyopathic hamster with colleagues at Osaka University School of Medicine. He has had great influence as a cardiac pathologist, on the many researchers in the field of cardiology in Japan. He founded the Japan Society for Adaptation Medicine in 1996, was the Congress President of ISHR Japanese section in 1992 and Congress President of the Japan Society for Adaptation Medicine in 1998.

Dr. Onishi delivered an Award Lecture on Cell Injury, Adaptation and Death at the 4th IACS Japan Section Meeting in July 2004 in Osaka.

Dr. Onishi is a Fellow of IACS.



Obesity: Another Wolf at the Door?

by Thomas E. Kottke, Minneapolis, USA and Rebecca S. Hoffman, San Francisco, USA

Introduction

Pestilence, war, and famine historically have been the primary sources of death and economic chaos for human beings. In the past decade, however, the developed world has seen the emergence of a threat to the economy from a source never before experienced or expected—an epidemic of obesity. The epidemic has emerged from the coalescence of 3 factors: a genetic heritage shaped by past selective pressures; an environment in which food is ever-present and physical activity is nearly unnecessary; and, behaviors or lifestyles that result in more calories consumed than expended.

The interplay of the genetic, environmental and behavioral factors leads to obesity which in turn leads to direct health effects (increased health care costs, physical disability and depression) and indirect health effects (occupational disability, reduced purchasing power and

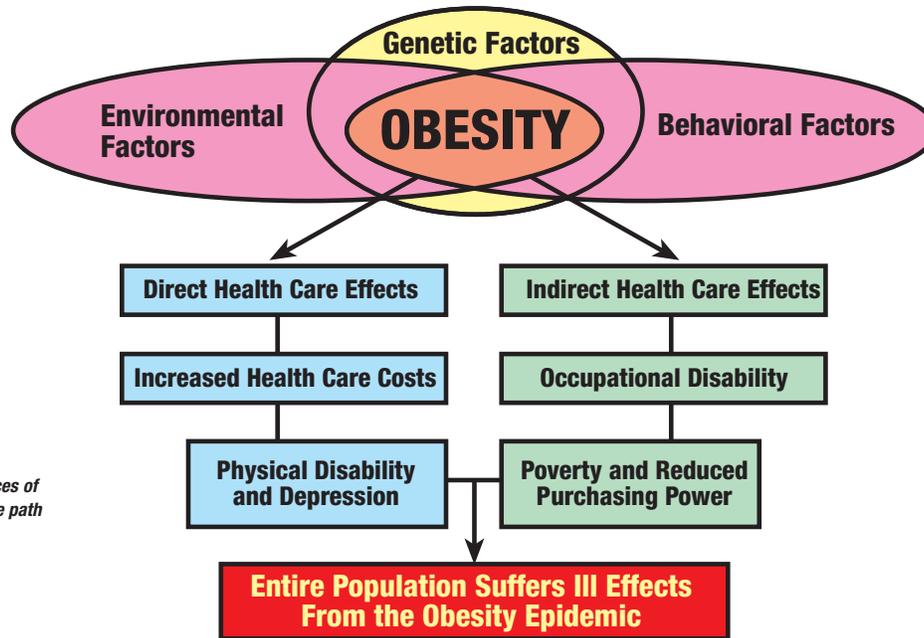


Figure 1. Sources of obesity and the path of economic consequences.

poverty). Economic and psychological interdependence places all individuals at risk of suffering the ill effects of the obesity epidemic regardless of their own body mass index (BMI). Because this epidemic appears to be in its early stages, the cost estimates presented in this paper should not be used to decide whether or not the cost can be absorbed by economic growth. Instead, we present a case that the cost of the obesity epidemic will balloon and reach a "tipping point"—a point beyond which the negative effects of obesity will rapidly and perhaps irreversibly result in economic decline.

We present a brief description of the program that we have developed in our own community to prevent obesity and other conditions that constitute "the lifestyle syndrome". In addition to obesity, the lifestyle syndrome includes heart disease, cancer, stroke, type 2 diabetes, osteoarthritis and a myriad of other conditions. We have developed a program, CardioVision 2020, so that we never have to cross the tipping point of the obesity epidemic and experience the physical, economic and psychological landscape that lies beyond it.

Our Genetic Heritage

The pioneering exercise physiologist, Per-Olaf Åstrand, has observed that selective pressure from famine in the past has resulted in adult mammals that have the urge to sit quietly when presented with the opportunity and to eat whenever food is available. It also appears that humans eat when anxious. Sitting quietly, eating whenever food is present, and particularly eating when anxious, improved survival in the past when there were long periods of intense famine and anxiety was a response to threats that required flight or fight.

Today these behaviors threaten our health and well-being. In the developed world, many foods have up to ten times the caloric content per unit of volume compared to the roots, grains and lean meats that have been available throughout most of the existence of the human race. Modern humans literally have to run away from food and buy physical activity if they are to counter the effects of the urges that lead to pathological obesity.

The Environment

In addition to inexpensive food, expensive physical activity, and the deeply-seated urge to collect and conserve calories, electronics, marketing, and diminishing opportunities for physical activity are contributing to the obesity epidemic among both adults and youth. While great concern has been expressed that attention to obesity will generate an epidemic of anorexia, bulimia and underweight, there is little evidence to date that such an epidemic is occurring. In Olmsted County, Minnesota less than 4% of women and less than 1% of men report heights associated with weights that place them in the underweight category.

The Financial Burden

Although the obesity epidemic appears to be just beginning, the economic burden of obesity for the United States is already striking. It has been estimated the annual total cost of obesity to the American business economy to be \$12.7 billion in 1994. The largest proportion was \$7.7 billion for health insurance premiums, followed by \$2.4 billion for paid sick leave, \$1.8 billion for higher life insurance pre-

miums, and \$0.8 billion for disability insurance.

Median per capita medical costs for a single employer, General Motors, increased by 69% as BMI increased from normal to >40. Our group recently found that, compared to costs for individuals with ideal BMIs, monthly pharmacy costs to completely treat obesity-related medical conditions were 1.7 times higher for overweight males and 3.2 times higher for obese females. Recent analyses of costs due to obesity-associated diseases for American youth 6-17 years of age found that annual hospital costs increased more than threefold when an individual was obese.

The Tipping Point and Beyond

What the economic statistics do not convey is the extent to which everyone, not just the obese, will be affected by the epidemic. As the obesity epidemic increases disease, disability and health care costs, employers and government agencies can be expected to pass these increases on to consumers. Consumers who are either unwilling or unable to pay for all care that has been prescribed will concentrate on symptomatic care while neglecting disease prevention and risk factor control. For example, there is evidence that, faced with the need to take an ACE inhibitor for hypertension and a statin for hyperlipidemia while experiencing gastrointestinal reflux disease and arthralgias, many individuals will skip doses of their ACE inhibitors and statins to pay for their prescriptions of proton pump inhibitors and COX-2 antagonists.

Failure to stay current with indicated preventive services and failure to control disease risk factors will result in a spiral of unnecessary illness, unnecessary health care costs, and unnecessary disability—all promoting a widening gap between the need for health care and the resources that are available to pay for it. The end result will be a decline in length of life and a decline in quality of life. As an increasing proportion of elderly are unable to care for themselves because they are obese, and as an increasing proportion of working-age Americans are unable to remain in the labor force because they are disabled by their obesity, labor shortages will develop. Labor shortages can be particularly expected for hospital-based jobs as workers shy away from the threat of musculoskeletal injury incurred by moving obese patients who cannot care for themselves.

Diverting take-home income to health care expenses will have a profoundly negative effect on other sectors of the economy. As take-home income is diverted to health care, American families will have less money to purchase consumer goods, services, and education. They will also have less money to donate to religious and other voluntary organizations. Less money overall in these sectors of the economy will mean less money with which to purchase health services. The outcome will be a downward spiral of contraction for the entire economy.

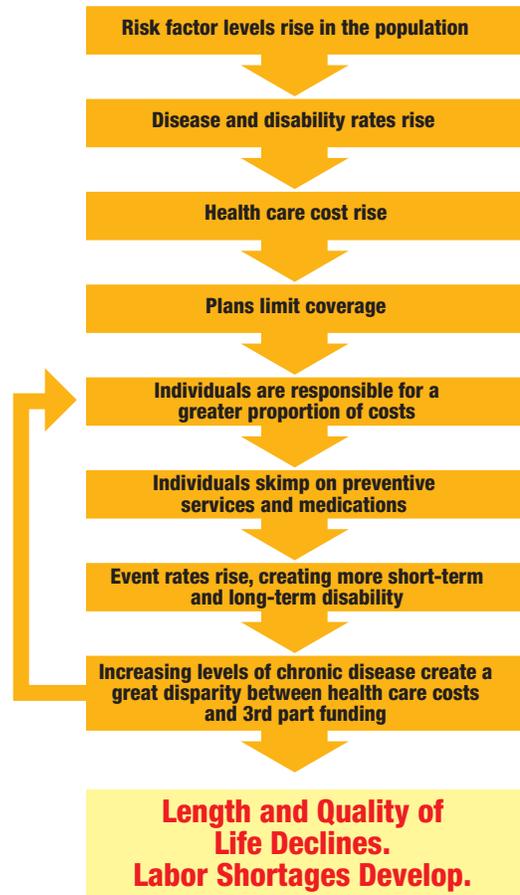
The Psychological Repercussions

Obesity causes anxiety and depression. But the anxiety and depression generated by the obesity epidemic will not be limited to the individuals who develop the chronic diseases associated with obesity. The negative psychological consequences will extend to their friends, relatives, and associates. Individuals disabled by obesity can be expected to turn to their non-disabled friends and relatives for financial assistance, forcing them to make unpleasant choices between purchasing a car, home, or vacation for themselves, or purchasing health and long-term care for their friends and relatives. As individuals exhaust the resources of their friends and relatives, they will ask their local health care providers (mainly at the door of the emergency department) for assistance.

Some might hypothesize that poverty and disability will limit the magnitude of the obesity epidemic. However, the positive correlation between lower socio-economic status and obesity suggests that poverty is unlikely to stop the obesity epidemic in the near term. Calories are cheap in the United States; as we have previously reported, 1,500 calories costs five dollars at a fast food restaurant and costs even less at a grocery store. For about \$7.50, one can consume unlimited calories at a buffet. Food programs are available to help those who cannot afford to purchase food.

Disability is also unlikely to stop the obesity epidemic. The ability to feed oneself is sustained even after one loses the ability to get out of bed, and as one becomes immobile, the need for calories diminishes and the propensity to become obese worsens.

Figure 2. The cascade of health care costs and coverage gaps leading to declining length of life, quality of life, and labor shortages.



Halting the Epidemic

Clifford Geertz, Professor of Social Science at the Institute for Advanced Study in Princeton, New Jersey, has written that "man is an animal trapped in webs of significance he himself has woven. I take culture to be those webs." While culture can be a trap—and there are individuals who believe that culture is immutable—culture can be and has been changed. The culture based on "fast food", the automobile-centered society, and the computer chip has only been developed in the past half century. Pessimism and inaction are the only true obstacles to reversing the culture that has created the obesity epidemic.

Although it is not clear whether the obesity epidemic is primarily due to an increase in the consumption of calories or a decline in physical activity, it is clear that obesity is fundamentally a result of energy imbalance: more calories consumed than burned.

As suggested by the Institute of Medicine report, *Health and Behavior: The Interplay of Biological, Behavioral, and Societal Influences*, environments must be created that make it possible and rewarding for individuals to avoid obesity in the first place and to maintain weight loss if they were obese at one time. Based on laboratory experiments and other data, the Institute of Medicine has concluded that one hour of daily moderate physical activity is required to prevent weight gain in adults and obesity in children. Walking and jogging appear to contribute equally to cardiovascular fitness, and walking or bicycling during daily activities and for recreation is more acceptable and achievable than jogging for many people. Communities must be designed so that people can move around by foot or bicycle as they go about their daily activities, for it is this attribute of communities that most strongly predicts the fitness of their residents. Low calorie foods—fruits and vegetables and cereal products made with water rather than fats—must be available at prices that are competitive with high fat, high calorie foods. Schools of all levels must provide food and beverage products that meet nutritional goals, and students must have adequate levels of physical education. Programs that market the benefits and pleasures of physical activity and low calorie foods must be developed and implemented to offset the well-financed and highly sophisticated campaigns produced by the food, alcohol, spectator sport, and entertainment industries.

For the past eight years, we have been developing and implementing a program to decrease the burden of the lifestyle syndrome in Olmsted County, CardioVision 2020. Along with freedom from tobacco and tobacco smoke, the program promotes a diet that is high in vegetables and fruits and limited in saturated fats. It also promotes at least 30 minutes of physical activity per day and control of serum cholesterol and blood pressure levels.

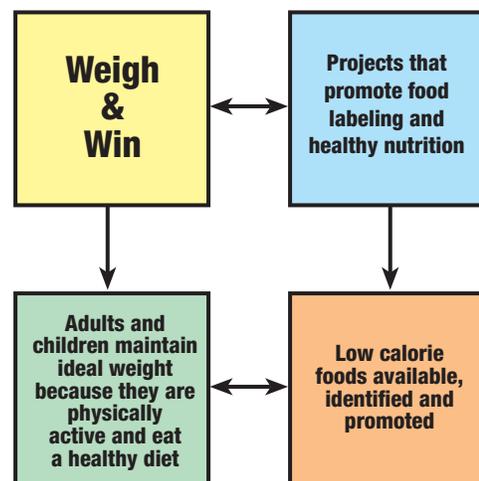
When developing CardioVision 2020, we recognized that prevention of the chronic diseases that result from lifestyle requires both personal commitment and community action. No legislation can prevent an individual from smoking if they wish, eating foods that do not promote good health, and avoiding physical activity. On the other hand, personal commitment to a lifestyle is not adequate if the individual does not have the opportunity to practice a health-promoting lifestyle. Therefore, the CardioVision 2020 weight control and physical activity programs have a goal of promoting both personal behavior change and the development of physical and social environments that promote and enable that change. The program recognizes

Figure 3. The down-stream effect of diverting take-home income to health care.

Diverting Take-Home Income to Health Care Will Result in...



Figure 4. The CardioVision 2020 model of intervention to promote healthy weight through contests to help people not gain weight during the holiday season (Weigh & Win) combined with the labeling of restaurant menu items for sodium, calorie and saturated fat content and the general promotion of healthy nutrition.



that individuals are more likely to adopt an innovation like healthy lifestyle if they can sample or "try" the behavior before making an irreversible decision.

For example, the CardioVision 2020 intervention to promote ideal weight through physical activity and healthy diet challenges people to "try" the lifestyle through a program we call "Weigh & Win". It offers raffle opportunities to participants who weigh themselves weekly through the holiday season, the time of year associated with the greatest weight gain. Advice about how caloric intake can be limited and physical activity can be maintained during the holiday season is offered on a web page. Coupled with the personal behavior change contest is a program to identify and label restaurant and delicatessen entrees that contain fewer than 1,000 mg of sodium and fewer than 500 calories, of which fewer than 7% are derived from saturated fat. The overall goal is permanent, voluntary behavior change through the development of supportive environments and contests that challenge people to try the new behaviors.

CardioVision 2020 uses a similar model to promote daily physical activity. "Walk & Win" is a brief challenge (30 to 60 days) designed to recruit people to try a lifestyle that includes daily physical activity. CardioVision 2020 simultaneously promotes the creation of a community environment that permits walking and bicycling as part of daily activities. The improved environment, coupled with the physical activity challenges, leads to the permanent adoption of a lifestyle that includes daily physical activity.

The coupling of personal behavior challenges with programs to improve the physical and social environment of the community creates synergy in the two processes. Weight control and physical activity challenges create demands for healthy foods and opportunities for physical activity. Conversely, labeled menus help the individual meet nutritional goals and safe and pleasant physical environments that permit physical activity also promote behavior change.

Even the best program will not sell itself, however. Therefore, social marketing is a fundamental component of the CardioVision 2020 intervention. CardioVision 2020 recruits formal and informal community opinion leaders to adopt and demonstrate the desired behaviors to others in the community.

Rechanneling Opposition

We must not ignore the fact that reducing the behaviors that are generating the obesity epidemic will be perceived as threatening to several industries. Among these are the producers of calorie-dense processed foods. The spectator sport industry and the entertainment industry may feel threatened, too, as people are urged to turn to more active leisure-time activities. The automobile industry has a record of opposing the use of public funds for mass transit, and individuals who use motorized recreational vehicles such as snow mobiles and all terrain vehicles have fought the use of gasoline taxes to support trails and other facilities for the "silent sports", bicycling and skiing. Developers can be expected not to immediately embrace community designs that allow the prevention of obesity because trails and walkways consume land upon which houses could be built and sold. The alcohol industry, promoting high calorie beverages and leisure-time activity that involves little physical activity, will also be threatened. If, however, potential reasons for opposition are identified, they can be expected, planned for, and overcome.

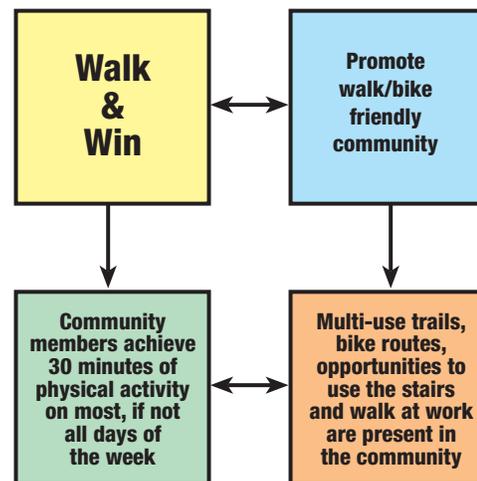
Companies that believe they stand to lose if individuals adopt a healthy lifestyle may frame their argument against health promotion as a choice between good health and good business. To deal with this argument, CardioVision 2020 points out that good health is good business. Healthy people are productive and have disposable income; individuals who are occupationally disabled because of chronic disease do not.

Businesses are in business to make money, and individuals and corporations that are good at business will be able to react and make a profit from the promotion of healthy lifestyles. After posting the first loss in the history of the company in the fourth quarter of 2002, McDonalds recovered by developing a new line of low calorie offerings. Some dine-in restaurant chains have followed suit. Being prepared with the message good health is good business is the first step in developing strategies to overcome opposition to programs that promote personal and environmental change.

Conclusion

While there have always been isolated individuals who have suffered the ill-effects of gluttony, until today the "wolf at the door" for entire populations has always been famine, war, or pestilence. There has never before been a society that faced an epidemic rooted in wealth and plenty.

Figure 5. The CardioVision 2020 model of intervention to promote physical activity through contests to help people sample daily physical activity (Walk & Win) combined with campaigns to make the physical environment more conducive to physical activity.



For the societies of today with developed economies, there is another wolf at the door, epidemic obesity. Unless the sources of the epidemic are neutralized, the entire population, even individuals of ideal body mass, will suffer the economic and psychological effects of the obesity epidemic.

This epidemic must be seen as requiring a commitment both to a particular personal behavior pattern and a commitment to a community environment that supports the behavior pattern. Interventions must be developed to help people understand that each individual needs a lifestyle plan and that they should not rely on the food, entertainment, alcohol, tobacco or automobile industries to develop that plan for them. Communities must be designed or retrofitted to both allow and encourage people of all ages to eat nutritious foods and to move about on foot or bicycle as they go about their daily business.

Even if these interventions are successful, an obesity epidemic will always be a threat to an affluent society. But personal commitment and community action can hold the threat at bay while members of the society enjoy long, healthy, prosperous and happy lives.

Editors Note: This article originally appeared in Clinical Obstetrics and Gynecology 2004; 47(4):890-7. It appears by permission of the publishers. The original article was written by Thomas E. Kottke, MD, MSPH, Justo Sierra Johnson, MD and Thomas G. Allison, PhD of Mayo Clinic and Foundation, Rochester, Minnesota; and Rebecca S. Hoffman, BA of Rebecca Hoffman, Inc., San Francisco, California 

ADVANCES IN HEART HEALTH

“Preserving the Passion” New Book Helps Physicians Maintain ‘Zest’ for Practice

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Lois DeBakey, Ph.D.

methods they have used to keep abreast of current medical knowledge, maintain clinical skills, and preserve enthusiasm for medicine throughout their careers.

"We interviewed more than 600 physicians, and gleaned the best thoughts and advice from each," DeBakey said.

A personal essay is written by Lois DeBakey's brother, Michael E. DeBakey, M.D., Chancellor Emeritus of Baylor College of Medicine and

A young woman with severe ulcerative colitis was admitted to the Mayo Clinic in the 1950s. The staff did everything possible to make her comfortable, but her symptoms continued without change until the morning she was visited by J. Arnold Bargaen, M.D., an early pioneer in the study and management of inflammatory bowel disease. Bargaen walked across the room and stood at the patient's bedside, reaching out to grasp her right hand with his and placing his left hand on her forearm. Looking her straight in the eye, he said, "I am so glad you have come! We are going to make you better!" He then asked the young woman about the history of her disease and performed a physical examination.

The medical staff noted the very moment Bargaen offered the patient his heartfelt greeting, she seemed to relax. As the day wore on, all her clinical signs improved. Her fever abated, her diarrhea and abdominal pain quieted down, and indeed she did get better.

"I have always thought that the magic of his greeting was transferred to that woman through the warmth of his handshake and his evident honesty," recalls Richard Reitmeier, one of Bargaen's assistants in the hospital at the time. "He really did care about her."

SHARED SUCCESSES

This vignette is one of many in a newly published book that highlights the importance of the doctor-patient relationship, and reaffirms physicians' passion for practicing medicine, despite 21st century impediments such as managed care, runaway malpractice suits, and information overload.

Authored by Lois DeBakey, Ph.D. and Phil R. Manning, M.D., "Medicine: Preserving the Passion in the 21st Century" is filled with anecdotes by leaders in medicine describing

the father of modern cardiovascular surgery. In his essay, he discusses the early influences that led him to medicine, and offers career advice for anyone pondering which profession to pursue.

"I consider it essential to select a career that greatly appeals to you instead of taking the line of least resistance and indiscriminately or fortuitously entering a path to which you must then commit yourself for life," he advises. "If your work is not enjoyable, you will look for any diversion or distraction you can find; you will rarely do your best; and you will feel no pride or satisfaction in your performance."

First published in 1987, the book's all-new second edition is expanded to include information that acknowledges recent changes in modern-day medicine, such as medical informatics, mismanaged care (as Lois DeBakey calls it), the Internet's impact on medical practice and the growing number of women entering medicine.

The book reveals how some of the nation's most eminent physicians provide the most effective care for their patients, keep abreast of the latest medical knowledge, and still preserve the passion that directed them toward medicine in the first place.

"We wanted to show that medicine can still be a rewarding profession if the principles advocated in the book are applied, and if physicians enter the profession for the right humanitarian reason – to help the ailing," says Lois DeBakey.

TOUR DE FORCE

The pairing of Lois DeBakey and Phil Manning as authors represents an intellectual "tour de force." DeBakey holds a Ph.D. in literature and linguistics and is a professor of scientific communication at Baylor College of Medicine. A leading scholar in medical communications, she has been called "the medical world's great communicator" and is credited with doing more "to bring literacy to medical writing than any other person in the country." C. Rollins Hanlon, M.D., former director of the American College of Surgeons, has described DeBakey as a "renowned exemplar of clear, forceful writing," and Franz Ingelfinger, M.D., former editor of *The New England Journal of Medicine*, wrote "... the disciples of Aesculapius have their own guides to better speaking and writing, and among them none compares to the DeBakey sisters, Lois ... and Selma." (Selma DeBakey also is a professor of scientific communication at Baylor and a noted medical editor in her own right.)

Phil Manning is a physician with a lifelong interest in continuing medical education. Recognized as the "international dean" and "guru" of continuing medical education, he was a professor of medicine and associate dean in charge of postgraduate medical education at the University of Southern California School of Medicine until his retirement in 2002. He is credited with doing more to influence continuing medical education than any other single person.

Manning and DeBakey met almost two decades ago while both were serving on the review committee for the National Library of Medicine.

"Communication and medicine are more closely related than we realize. Clear, concise communication is indispensable in medicine," Manning said.

Realizing this, the pair joined forces to produce an inspirational, instructive and informative text that is now required reading in many medical school curricula.

DEMORALIZATION OF DOCTORS

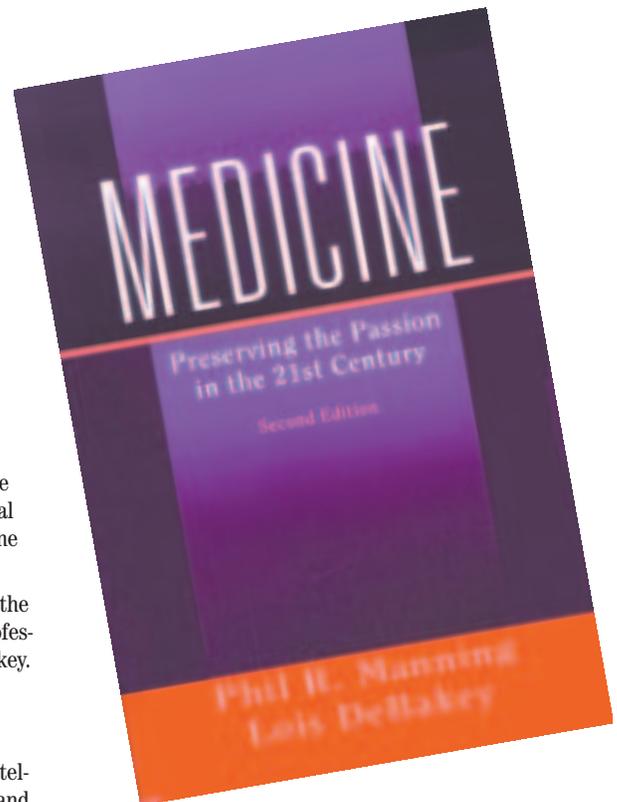
"Those who choose medicine as a profession today must navigate through the bureaucratic channels of 'mismanaged' care, pay enormous insurance premiums to protect against malpractice suits, and wade through an unending sea of journals, abstracts and books to keep abreast of the most recent medical findings," said DeBakey. "It's overwhelming, and sometimes demoralizing."

This "demoralization of doctors" has discouraged some to the point of taking early retirement or changing professions altogether, she said.

A major irritant for many physicians is the intrusion of outsiders into medical decision-making.

"Doctors are naturally frustrated when a managed care nonphysician 'authority' who has never seen the patient sits miles away, consulting a computer for the 'guidelines' about diagnostic and therapeutic procedures the doctor may or may not be allowed to perform," DeBakey said. "What's worse, many HMOs have gag rules prohibiting a physician from telling patients that their HMO has rejected a procedure the doctor deems necessary."

When a physician cannot be honest with a patient, the relationship is compromised and the patient is victimized, DeBakey contends.



"Medicine: Preserving the Passion in the 21st Century" is filled with anecdotes by leaders in medicine describing methods they have used to keep abreast of current medical knowledge, maintain clinical skills, and preserve enthusiasm for medicine throughout their careers.

Many HMOs reward physicians with a bonus on the basis of how much care they deny patients and punish them if they exceed a certain cost for health care.

While this practice bodes well for organizations specifically designed as "for-profits," it should never be the goal of the medical profession, contends DeBakey.

"Physicians deserve fair remuneration for their services, but medicine is a noble profession, not intended to be a commercial venture."

In a 1999 Wall Street Journal article titled "Should Physicians Unionize?" Lois and Michael DeBakey contend that managed care organizations' priority on profits come at patients' expense.

"The overriding dictum (in managed care) is to save money for corporate officers, not to provide quality health care to patients," they point out.

Besides watching balance sheets, today's doctors also are forced to watch the clock. Managed care dictates that physicians are allowed only so many minutes with a patient – usually 15 for an uncomplicated problem and up to 30 for a more involved condition. This production-line medicine, where a patient is a number instead of a person, transforms the elevated calling of medicine to just another job – one filled with endless paperwork and daily quotas. Again, doctors often are prohibited from telling their patients about this HMO-imposed time constraint.

Hence, the public perception of physicians becomes negatively skewed, with patients believing their doctors are trying to "hurry" them out of the exam room.

"This erodes the patient-physician bond, which has a direct effect on the success of medical treatment. When you disturb that bond, you've done a great disservice to medicine," DeBakey said.

The portrait of doctors in the public media as rich, greedy and aloof is undeserved, says DeBakey, who is satiated with what she calls "doctor bashing."

The average income of physicians is about \$125,000 annually, she explains, some of which goes to pay for office space, staff salaries, student loans, and malpractice insurance premiums. Physicians are required by law to purchase malpractice insurance, although 90 percent of Texas malpractice suits are dropped because the courts deem them to be without merit.

Doctors go to school one-third of their lives, often at great personal and financial sacrifice. Medicine is not a 9-to-5 job, and many physicians spend long hours at the hospital out of concern for patients, DeBakey contends.

"The doctors I know care and want to give their best for each patient, whether that patient is a head-of-state or a pauper ... the goal is to champion the patient and to see him or her through."

"If you want to talk greed, what about superstar athletes, TV personalities, and other entertainers who command megamillion-dollar contracts?" DeBakey asks. "They're very rich but never satisfied, and are often poor role models for the young people who strive to emulate them. But worst of all, they are allowed to use their 'celebrity' status to publicize their views, and thus influence public opinion on social, political, and even medical and health issues about which they are often ill-informed. That makes little sense when professional experts on these subjects are readily available," she says.

PRESCRIPTION FOR PASSION

All points considered, it's understandable that some physicians say the fun has gone out of medicine and they wouldn't advise their children to go into it. But DeBakey and Manning remind readers of the pleasure that medicine brings. Those born to be healers can no more turn their back on their life's calling than a mother could turn her back on her child.

How then, do today's doctors hold onto the passion that led them into medicine?

DeBakey and Manning offer a prescription: "Immerse yourself in lifelong, self-directed learning, in solving your patients' medical problems, examine your treatments and assess your mistakes to keep improving your health care delivery." Then, they say, you will know the "enjoyment, satisfaction and exhilaration," the "joy and gusto of intellectual expansion and service," and you will preserve your passion for medicine. The pitfalls will be placed in perspective, and disenchantment will give way to the delight that comes from living with passion and purpose.

Every medical scholar since Hippocrates has agreed that the education of the doctor after graduation is the most important part of medical learning. DeBakey and Manning show doctors how to perform "practice-linked continuing education" – to analytically study how their patients respond to various treatments. One proponent of this method is Michael E. DeBakey.

"My brother has done this for decades," says Lois DeBakey. "He writes follow-up letters to his patients every year, then analyzes the outcomes. Such tracking offers insight into which treatments are the most successful."

All doctors should engage in this practice, DeBakey and Manning advise.

Continuing education lectures are fine, but the trend should be away from coursework and toward more personalized continuing education. It's more efficient, they advocate, than the "one-size-fits-all" mentality of a medical lecture presented to a mass audience.

Competent doctors have intellectual curiosity about their field, and a stubborn persistence to find the answer to a patient's problem, even when the answer doesn't come easily. They doggedly search multiple sources, seek information and consultations, and stay "with it" until the mystery is solved.

Good medicine requires a great deal of self-discipline, DeBakey says, and the best doctors set aside a certain amount of time each day for self-education and keeping current with new information.

"People who don't want to become lifelong students should not become doctors," advises DeBakey.

An explosion of medical information has erupted in recent years, thanks to modern information technology. Physicians may have precious little or no time to even scan the voluminous amount of updated medical information cascading across their desks every day.

How can they keep abreast of the tidal wave of articles, abstracts and essays without sacrificing sleep or personal time?

"Scan the three major journals – JAMA, the New England Journal of Medicine, and Lancet. If you don't have time to read entire articles, at least read the abstracts, then perhaps the introduction, discussion, and conclusions. Do read articles carefully that relate to your practice," suggest DeBakey and Manning.

"Learn to read critically in order to distinguish the valid from the invalid, or flawed, in presumably evidence-based reports," they caution.

Electronic databases are invaluable in obtaining answers to specific questions about certain patients, they advise. Some, including one named "Up to Date," can be installed in the exam room, and can provide real-time answers as doctors are examining patients.

COMPASSION AND COMPETENCE

Intellectual medicine that engages the brain is rendered weak if a doctor's heart remains untouched. A dose of compassion, compounded with medical know-how, is the hallmark of a good physician, DeBakey says.

"Compassion is an essential component of medical competence. If a doctor lacks compassion, a patient may not comply with doctor's orders. A contented patient will have a better outcome," DeBakey says.

A simple touch, such as a warm hand on a shoulder, conveys a subliminal message of caring. A doctor who listens without becoming bored or blasé, one who looks you in the eye, invites questions, and says "the latest research shows," or "I just read ..." is probably an excellent doctor, DeBakey says.

"Because medical students, residents, and young physicians entered medicine in an era dominated by machines – diagnostic and therapeutic – and by medical informatics, they may not have had an opportunity to recognize the value of, or fully develop, the physician-patient relationship," DeBakey points out.

The book emphasizes the need to re-humanize medicine and health care delivery

Compassion comes naturally to those who enter medicine for the right reason – to heal the sick.

"Don't go into medicine to make a fortune. You'll be disappointed in your choice of profession, and your patients will be disappointed in you. There are plenty of other ventures you can pursue to become a multimillionaire. Medicine is reserved for those who are called." ❤️



To promote cardiovascular education of professionals and lay people and to recognize major cardiovascular achievements throughout the world.

The Academy

The International Academy of Cardiovascular Sciences was founded in 1996 and is headquartered in Winnipeg, Manitoba, Canada. Established by renowned Cardiovascular Scientists, Surgeons and Cardiologists, the Academy provides the organizational structure for the world-wide sharing of research and education information in the field of heart health.

Although great strides have been made in improving the death rate from heart disease, heart attacks and related problems are still the number one killer. The Academy believes that research has found answers but the facts are too slow in moving beyond the laboratories to the bedside.

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Dr. Turan visited Winnipeg in September to finalize plans for the NATO Symposium - contributing to the discussions were (L to R) Ken Dhalla, Ivan Berkowitz, Harjot Saini from India, Belma Turan, Judit Barta from Hungary and Naranjan Dhalla

The Nato Advanced Research Workshop, organized by the Academy, will focus on the effects of different stresses on:

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- mitochondria and their channels in pathological situation and apoptosis
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- myocardial injury mediated by endocardium
- calcium handling in the diabetic heart
- endogenous cardioprotection operating in diabetic heart
- oxidative stress and antioxidants in myocardium
- nitric oxide signaling and effect of NOSs in cardiac protection
- catecholamine signaling in the heart

LIST OF KEY SPEAKERS

ALTAN M. (Turkey), AVKIRAN M. (U.K.), CERBAI E. (Italy), DAS D. K. (USA), DHALLA N. S. (Canada), KESSLER-ICEKSON G. (Israel), KJELDSEN K. (Denmark), LOPASCHUK G. D. (Canada), McNAMARA D. B. (USA), OSTADAL B. (Czech Republic), SEPPET E. (Estonia), SINGAL P. K. (Canada), SIPIIDO K. (Belgium), SLEZAK J. (Slovak Republic), SMIRNOV V. N. (Russia), TURAN B. (Turkey), VASSORT G. (France), VEGH A. (Hungary), WERDAN K. (Germany)

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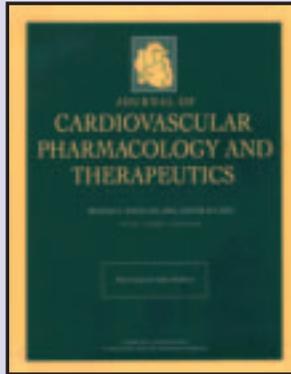
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Buoyed by the extraordinary success of the International Conference held in Lucknow, India, Jan. 9 - 11, 2004, the International Academy of Cardiovascular Sciences and the International Society for Heart Research (Indian Section) have announced plans for a second Joint International Conference - "BENCH to BEDSIDE in GHANDI's GUJARAT", Dec. 31, 2004 - Jan. 2, 2005. Grand Bhagwati, Grandhinagar - Sarkhej Highway, AHMEDABAD, INDIA. For details, please visit the web site: <http://www.indianheart.com/conference/index.html> Or contact the Conference Co-ordinator: Dr. Ramesh K. Goyal, Professor, Dept. of Pharmacology, L.M. College of Pharmacy, P.O.Box 4011 Navarangpura, Ahmedabad, 380 009, India. E-mail: goyalrk@hotmail.com

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We encourage further donations to build a Memorial Fund from the base created by the donation, reported on in Volume 3 Number 1 issue of CV Network, from the Myles Robinson Memorial Heart Fund.

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