

# Absolute ADVANTAGE

VOLUME 3, NUMBER 8

THE WORKPLACE WELLNESS MAGAZINE

## The CHIP Prescription For Health



The Coronary Health Improvement Project Helps  
Organizations And Individuals Implement Lifestyle Medicine



### IN THIS ISSUE:

For fifteen years, the Coronary Health Improvement Project (CHIP) has been helping people markedly reduce coronary risk factor levels by promoting healthier food choices and appropriate lifestyle changes.

In this issue of *Absolute Advantage*, we'll examine this powerful program and share individual and community success stories from all across the United States. With more than 40,000 graduates worldwide, CHIP is an initiative that can help you make a profound impact on the health and well-being of your employees, your organization, and your community.



Each month you can learn more about the articles in *Absolute Advantage*.

Simply log on to WELCOA's members only website to get more in-depth coverage of the topics that matter most to you. Find full-length interviews, expert insight, and links to additional information that will help you do your job better!

THE WELLNESS COUNCILS OF AMERICA

Give others in your company the Advantage. Please route to: ☐ Senior Management ☐ Human Resources ☐ Benefits Department ☐ Fitness Center

## From The Executive Editor

The good life is killing us. Chronic Western diseases have established a stronghold in the American workplace and in our communities, and for those of us responsible for protecting and enhancing health, it seems we are quickly running out of options. With 70 percent of all deaths now being attributed to poor lifestyle choices, and health-care costs consuming large portions of corporate profits, it is indeed evident that we have reached the breakpoint. But there is hope.

The Coronary Health Improvement Project (CHIP) offers that hope. By teaching people to make simple lifestyle changes to prevent, arrest, and in many cases, even reverse the ravages of chronic Western disease, CHIP offers employees a chance to pursue not the good life, but the “best life,” a life full of health, happiness, and strong social support.

In this issue of *Absolute Advantage*, we'll uncover the CHIP program in theory and in practice. We'll demonstrate how healthy eating habits, a regular exercise program, and a connection with the CHIP community can make a difference in the lives of workers. We'll feature CHIP programs ongoing at corporations, hospitals, schools, and faith communities, and make a case for the implementation of CHIP as an answer to many of the health problems we are now facing as working Americans.

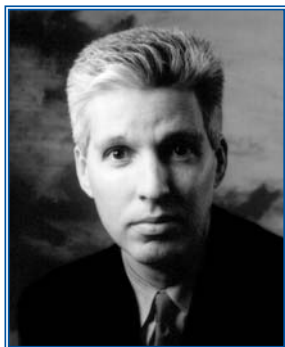
We are pleased to have worked with Dr. Hans Diehl and Peter Vedro, leaders of the CHIP program, to produce this issue. Their passion for improving health has changed the lives of more than 40,000 people. And, with more than 150 new CHIP chapters added in just the last three years, the number of individuals who will one day live the “best life” is sure to grow by leaps and bounds.

I trust that you will carefully examine the concepts presented in this issue, and consider how CHIP can make a profound difference at your organization and in the lives of your employees.

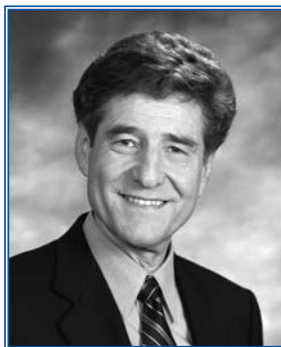
Enjoy the issue,



David Hunnicutt, PhD  
President and Executive Editor



David Hunnicutt, PhD



Hans Diehl, DrHSc, MPH



Peter J. Vedro, MAT

By teaching people to make simple lifestyle changes to prevent, arrest, and in many cases, even reverse the ravages of chronic Western disease, **CHIP offers employees a chance to pursue not the good life, but the “best life,” a life full of health, happiness, and strong social support.**

# Absolute ADVANTAGE

VOLUME 3, NUMBER 8  
THE WORKPLACE WELLNESS MAGAZINE

Organizational Founder, William Kizer, Sr.

## Welcome

*Absolute Advantage* is the interactive workplace wellness magazine that helps large and small employers link health and well-being to business outcomes. *Absolute Advantage* arms business leaders and wellness practitioners with leading-edge workplace wellness information straight from the field's most respected business and health experts.

With its online component, *Absolute Advantage* provides the industry's most current and accurate information. By logging on to the magazine's interactive website, you can access a whole new world of health promotion—including in-depth interviews with national health promotion experts and insider's information about industry products.

### Subscription Information

For information about subscribing to *Absolute Advantage*, contact the Wellness Councils of America at 402-827-3590 or via e-mail at [wellworkplace@welcoa.org](mailto:wellworkplace@welcoa.org).

### Ab•sol•ute Ad•van•tage:

When a company can produce more than its competitors—even though they have the same amount of resources—it has an absolute advantage. We believe wellness is that advantage.

### Executive Editor, David Hunnicutt, PhD

Dr. Hunnicutt is President of the Wellness Councils of America. As a leader in the field of health promotion, his vision has led to the creation of numerous publications designed to link health promotion objectives to business outcomes.

### Senior Editor, Mike Perko, PhD

Dr. Perko has significant experience in worksite wellness. Currently an Associate Professor at the University of North Carolina at Wilmington, Dr. Perko also serves on WELCOA's Medical Advisory Board. He has also served as Associate Director of *Good Health Makes Sense*, in Birmingham, AL.

### Senior Consultant, Joe Leutzinger, PhD

Formerly Director of Health Promotion at Union Pacific Railroad, Dr. Leutzinger is currently responsible for developing the consulting division of WELCOA. Dr. Leutzinger works with community health groups, private employers, and research funders, and also contributes to the publishing, research, and grant-writing sectors of the organization.

### Managing Editor, Brittanie Leffelman, MS

Brittanie is the Director of Operations and manages major writing projects at WELCOA. With a Master's Degree in health promotion, she regularly coordinates national health forums, major grants, and state and local wellness initiatives.

### Director for Council Affairs, Kelly Stobbe, MEd

As the Director for Council Affairs, Kelly is responsible for leading WELCOA's cadre of locally-affiliated wellness Councils. In this capacity, Kelly coordinates the *Well Workplace* awards initiative as well as the *Well City USA* community health project.

### Director of Publications, Bo Abresch

With a strong background in writing and corporate communication, Bo manages the writing and editing process for all major WELCOA publications including *Absolute Advantage* magazine. He has co-authored several publications including *Self Care Essentials: A Simple Guide to Managing Your Health Care and Living Well*.

### Creative Director, David Trouba, MA

With over 15 years of experience in magazine, book, and catalog design, David oversees all publications produced by WELCOA including *The Well Workplace* newsletter, *Absolute Advantage* magazine, brochures, books, and communications materials.

### Lead Graphic Designer, Justin Eggspuehler

A 2001 graphic design graduate from Iowa State University, Justin studied design in Rome, Italy before joining the WELCOA design staff. He is responsible for the layout and design of many publications including *The Well Workplace* newsletter and *Absolute Advantage* magazine.

Information in this publication is carefully reviewed for accuracy. Questions, comments, or ideas are welcome. Please direct to Dr. David Hunnicutt, Executive Editor, at the address below.

Information may not be reproduced, copied, cited, or circulated in any printed or electronic form without written permission from the publisher. ©2004 Wellness Councils of America, 9802 Nicholas Street, Suite 315, Omaha, NE 68114; phone (402)827-3590; fax (402)827-3594; visit our website at [www.welcoa.org](http://www.welcoa.org). All rights reserved. ISSN 1538-0084.

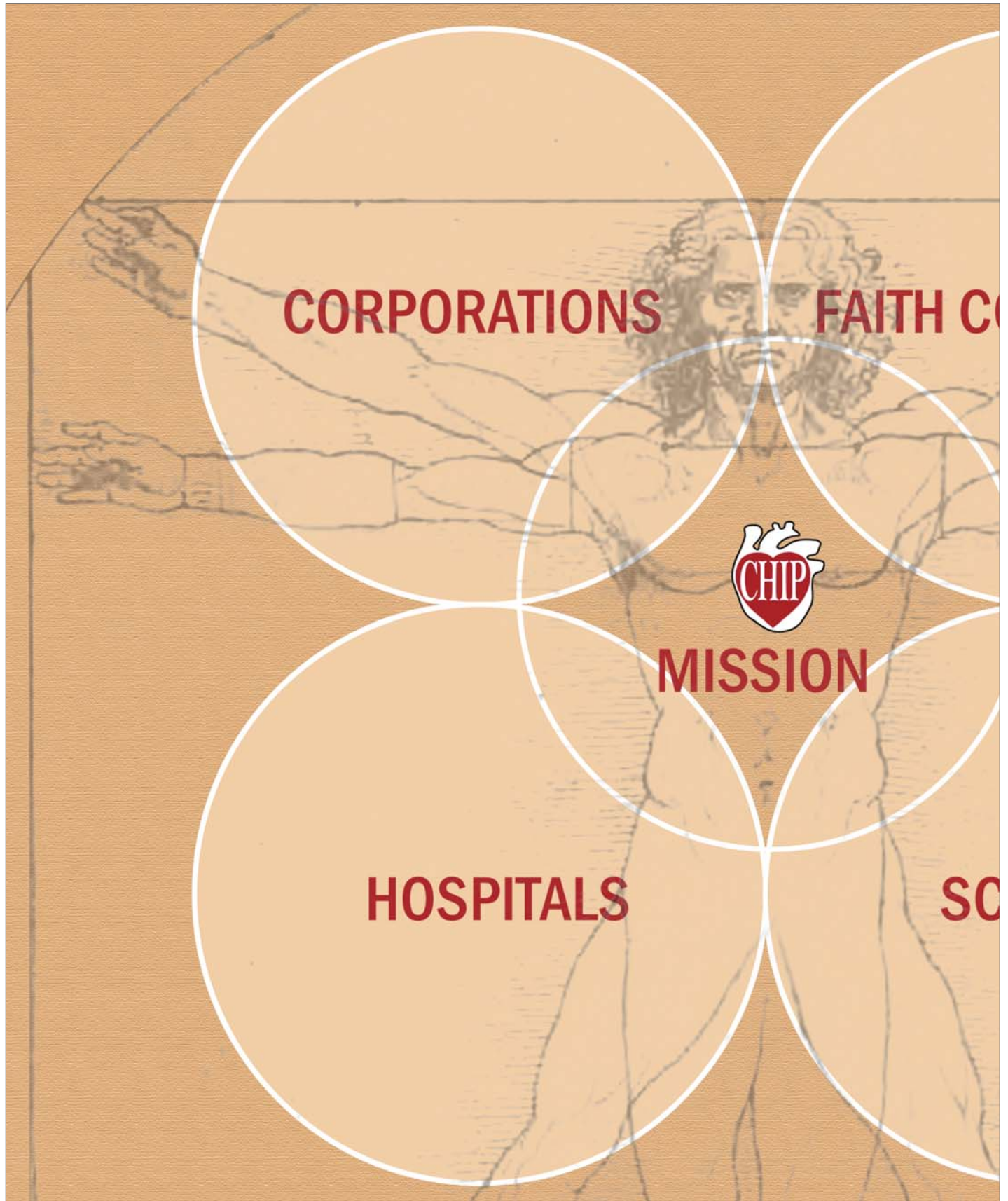
## TABLE OF CONTENTS

### The CHIP Prescription For Health

We are at the breakpoint when it comes to healthcare costs and our national health habits. The Coronary Health Improvement Project (CHIP) seeks to improve health by bringing "lifestyle medicine" to corporations, hospitals, schools, and faith communities. **Page 2**

- 6 The Problem With Western Medicine**  
CHIP Founder and this month's Guest Editor, Dr. Hans Diehl, sets the stage for the CHIP model and explains why Western medicine must evolve, or collapse under its own weight.  
**I By Hans Diehl, DrHSc, MPH**
- 14 Good Medicine**  
The Coronary Health Improvement Project (CHIP) helps individuals make simple lifestyle changes, allowing them to "get healthy by choice—not by chance."  
**I By Hans Diehl, DrHSc, MPH**
- 20 Change Of Heart**  
Roger L. Greenlaw, MD, Medical Director at the SwedishAmerican Center for Complementary Medicine, is leading a movement that encourages physicians to embrace preventive medicine, and put the word "health" back into healthcare.  
**I By Roger L. Greenlaw, MD**
- 26 The Rockford Files**  
The CHIP program has proven itself as a viable model to affect community health transformation. In fact, six worksites in Rockford, Illinois have proven that CHIP changes lives and betters business.  
**I By Hans Diehl, DrHSc, MPH, Roger L. Greenlaw, MD and Peter J. Vedro, MAT**
- 30 Have Faith In CHIP**  
Places of worship bring together active individuals with a passion for improving the world around them. Don't miss this feature on how CHIP has been incorporated into two vibrant faith communities.  
**I By Mark Hunter, Harold Burden, MPH and Dena Guthrie, RN**
- 34 Food For Thought**  
These two school nutrition programs help combat childhood obesity, enhance the educational environment, and teach food skills for life to our nation's students.  
**I By Antonia Demas, PhD and Barbara Stitt, PhD**
- 38 CHIP-Shape**  
In this "high seas" feature, we'll take a look at the CHIP cruise, an inspiring and relaxing way to "cruise and lose."  
**I By Laurel Lund and Carla Davis**
- 42 Chipping In**  
Several resources are available to help you bring the CHIP model to your organization. Check out these materials to learn how you can get started with CHIP today, and live a healthier tomorrow.  
**I By Peter J. Vedro, MAT**
- 44 Living The Best Life**  
Dr. Hans Diehl weighs in on the obesity epidemic and discusses how to lead a life of health, meaning, and purpose by developing a simple diet, a regular exercise plan, and strong personal relationships.  
**I INTERVIEW With Hans Diehl, DrHSc, MPH**





COMMUNITIES

SCHOOLS

# The CHIP Prescription For Health

**The Coronary Health Improvement Project (CHIP) seeks to stimulate national health transformation by bringing “lifestyle medicine” to corporations, hospitals, schools, and faith communities.**

**BY PETER J. VEDRO, MAT**

For anyone with an iota of responsibility for issues of health in our society—and that includes everyone reading this magazine—we are at the breakpoint. The old, familiar, and previously well supported—although not necessarily effective—systems and structures for personal, family, organizational, community, national, and even global health are giving way and collapsing under the weight of an ever expanding but much less healthy society. Identifying, codifying, categorizing, documenting, and evaluating the problem is no longer center stage. Now, the clarion cry, to paraphrase a well-known slogan is, “Just do something about it!”

Unfortunately, doing something about it at the individual level, as important as that is, will not solve the larger problem in time. As Einstein said, “We cannot solve the problem at the same level of thinking we were at when we created it!” A new way of thinking—a new paradigm—is needed. A “village” approach is the only viable solution; one which connects cause with effect in such a way that people understand and are empowered to take action; one which aligns the parts—individual behaviors—within the context of the whole—organizational and community infrastructures; and finally, as time is of the essence, one which focuses on the 20 percent of the problem which has the capacity to “make a difference that makes a difference”—an 80 percent difference in the health of our nation’s citizens. This solution must be capable of being implemented concurrently on the individual and on the larger-scale, leverageable community level.



## The CHIP Prescription

*The CHIP Prescription: Implementing Lifestyle Medicine* is one such plan. Our goal as CHIP Guest Editors is to use this magazine to bring to your attention the underlying issues, causes and effects, and the scientifically documented projects which have made a difference on all the meaningful parameters we as healers and leaders are concerned with: current health status, future quality of life, and yes, even the ROI!

It would be gratifying to say that the attention finally being paid to this problem is a result of the Herculean efforts over the years of the many scientists, clinicians, and health activists—but alas, I fear not. As in most things, it's the money! The terrifying reality of a current \$1.6 trillion dollar healthcare bill (and a potential doubling of that bill over the next 10 years) has galvanized public policy. The awesome burden of healthcare has become the central issue of contentious debate between management and union and employer and employee, just as it has for the tens of millions of under and uninsured who can only pray nothing befalls them or their children.

Ask Dave Koehler about the problem. Koehler is the Executive Director of PALM (Peoria Area Labor Management Council), and President and CEO of LMC Health Programs, a 17-year-old healthcare purchasing cooperative serving labor and management covering 43,000 lives. Koehler knows from direct experience that “the cost of healthcare from chronic diseases is going out of control. We’ve done everything we can with the economic side of the health equation—we’ve tried the HMOs and PPOs, we’ve tried them all. We are at the end of what we are able to do to reduce costs with that strategy.”

So, where do we go for new solutions?

For Koehler, an entirely new paradigm is needed. If, as the Surgeon General has told us, 70 percent of chronic diseases are directly related to lifestyle choices, then we’ve got to find the “leverageable” fulcrum—that handle that addresses the 20 percent of the population that drives 80 percent of healthcare costs. If we can do this, we can, as we say at CHIP, “make a difference that makes a difference.” Says Koehler, “Now, we’re looking into reducing healthcare costs by lessening the number of people using healthcare services, and the only way to reduce costs is to have healthier employees.” And there’s the rub! How do we get healthier employees? And how do we get healthier spouses, children, and retirees?

## The CHIP da Vinci Model

In this edition of *Absolute Advantage*, you’ll read about how CHIP (the Coronary Health Improvement Project) has been impacting lives on both an individual and community level. We’ll focus on the Midwest community of Rockford, Illinois (population 150,000), some 60 miles west of Chicago. A “nuts and bolts” manufacturing town, Rockford’s demographic reflects the nation’s. It is here in Rockford that the CHIP transformational template, represented by the CHIP da Vinci Model (see large graphic on pgs. 2 and 3) has had a chance to take root. Corporations, hospitals, faith communities, and schools, along with 30 local

restaurants, grocery stores, physical fitness centers, and other organizations have combined efforts to raise awareness that individual effort, combined with community action, can truly make a difference in the health of our nation’s citizens.

## CHIP Research And Science

Also in this issue, we’ll share summarized CHIP research from Steve Aldana, PhD of BYU, Roger L. Greenlaw, MD, and Heike Englert, PhD, on interventions at worksites and on a community-wide level. As important as the research is, we cannot forget that these statistics represent living human beings with real-time challenges. We are all dealing with the double-edged sword of chronic diseases, first cutting on health, and then slashing on the pocketbook.

## CHIP At Hospitals

We’ll try to grasp the challenges faced by both the individual health practitioner as well as the entire system when dealing with chronic disease. We’ll share an evolving model developed and implemented by Roger L. Greenlaw, MD, Medical Director of SwedishAmerican Health System’s Center for Complementary Medicine, Clinical Professor of Medicine at the University of Illinois College of Medicine at Rockford, and President of Rockford Gastroenterology. Taking a “systems approach” to the problem, Dr. Greenlaw’s model integrates patient and physician feedback loops, continuous improvement strategies, and ongoing quality measurements such as courses in lifestyle medicine for physicians and alumni service opportunities for patients.

## CHIP At Worksites

Next, we’ll look at the problem of declining health from a work-site perspective. Rockford Products Group, an Illinois-based manufacturing organization, is a typical example of an organization facing declining employee health and rising healthcare costs. Having survived the first series of challenges of the new “global” economy by utilizing every ounce of skill and mastery in the manufacturing process, Rockford Products must still face the daunting challenges of an aging workforce—one that is most susceptible to lingering, debilitating diseases as well as the rising costs associated with these diseases. Ray Wood, Chairman, President, and CEO, Richard Mowris, VP of Administration, Jerry Norquist, Director of Training and Development, and Dave Jackson—an employee—will share their viewpoints on the impact of CHIP at their workplace.

## CHIP At Faith Communities

We’ll also look at how some faith-communities are beginning to minister not only to the spirit, but to the body as well. One such example is Pilgrim Baptist Church, an African-American congregation in Rockford, Illinois which has implemented several CHIP Video Programs with their own trained and certified facilitators. Another is the Adventist CHIP Association (ACA), one of the most active and organized licensed CHIP affiliates in the nation, with more than 150 CHIP chapters and close to 10,000 alumni. The ACA provides CHIP Video Programs to their congregations and opens its doors to guests from the community.

“More and more we are finding that  
the ‘true’ answers to the larger  
problems of chronic diseases  
may not be the new answers,  
but rather the basic, fundamental,  
common sense advice of our grand-  
mothers—‘Eat right, exercise, get a  
good night’s sleep, and relax!’”

### **CHIP At Schools**

The CHIP strategy for community health transformation employs a “cradle-to-grave” process—we don’t forget the children! We work very closely with organizations serving youth, especially in our schools, to make a difference in both the classroom and in the cafeteria. Combining our CHIP for KIDS efforts with such leading authorities as Antonia Demas, PhD (creator of the *Food is Elementary* curriculum), and Barbara Stitt, PhD, sponsors of the *Appleton Alternative Schools Project*, we are utilizing a comprehensive, environmental approach that educates and motivates children through hands-on, sensory learning to make wiser choices in lifestyle behaviors which can last a lifetime.

### **CHIP On The High Seas**

Last, but certainly not least, a healthy lifestyle is a balanced, well-rounded, and complete lifestyle—one which includes plenty of

rest, relaxation, and fun! If you think you need to give up fun as part of making healthier lifestyle choices, think again. How about a cruise? For the past three years, CHIP graduates, alumni, and guests have enjoyed five-star service—including scrumptious meals for breakfast, lunch, and dinner—prepared by the chefs of the Carnival Cruise Lines’ smoke-free cruise ship, the *Paradise*. So interesting was this concept—joining together exercise, non-smoking, and healthy, five-star cuisine—that a national magazine sent one of their editors aboard to write a story about the experience. We’ve reprinted it for you here. This, and much more, awaits you in this edition of *Absolute Advantage*, an issue that offers a comprehensive view of the CHIP Program and how it impacts national health.

As a colleague used to say, “It’s no harder to change an organization than it is to change an individual—and no easier.” Try changing a community! However, we are fortunate to be living in challenging times; times when old models are being questioned—from estrogen replacement therapy to the limits of bypass surgery. More and more we are finding that the “true” answers to the larger problems of chronic diseases may not be the new answers, but rather the basic, fundamental, common sense advice of our grandmothers—“Eat right, exercise, get a good night’s sleep, and relax!” That sounds like the CHIP prescription to me.

So, if you share some aspect of responsibility for health in your organization—be it a hospital system, a worksite, a faith community, a school, or even a large community—we hope this issue of *Absolute Advantage* will be of benefit to you as you seek to bring improved health to those in your charge, and ultimately to the nation as a whole.★

### **ABOUT: Peter J. Vedro, MAT**

As Vice Chairman of Lifestyle Medicine Enterprises and President of The CHIP Alliance, Peter J. Vedro combines more than 15 years of business experience and executive leadership development to help individuals, organizations, and communities find new solutions for dealing with the challenges of today’s epidemic of Western diseases. A former founding Vice President of Stephen R. Covey’s organization (*The Seven Habits of Highly Effective People* and *Principle-Centered Leadership*), Peter has applied the lessons of personal and organizational leadership to the healthcare crisis, empowering individuals and organizations to be “healthy by choice, not chance.”

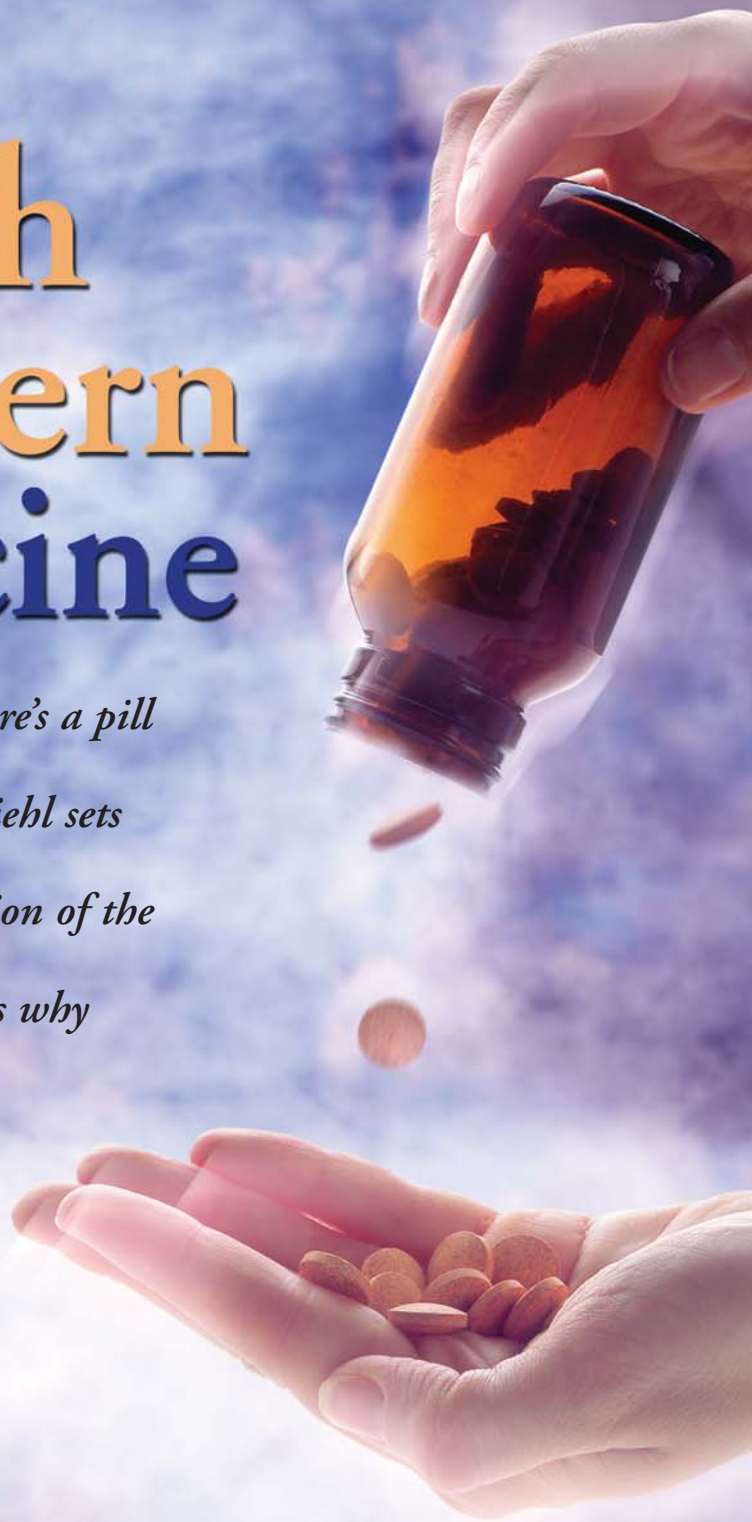
Co-architect and chief strategist of the Rockford/CHIP Community Health Transformation template, Peter has aligned multiple community coalitions—from worksites, schools, faith-communities, and medical organizations to food service providers, exercise and fitness centers, and social service groups—to “make a difference that makes a difference” in the health and well-being of their communities.

He writes the *Leadership Lessons* column for *NetObjects* magazine ([www.efuse.com](http://www.efuse.com)) where he shares his thoughts and practical advice for enhancing human effectiveness at the four levels of leadership: personal, interpersonal, managerial, and organizational.

# The Problem With Western Medicine

*In the US, for every ill there's a pill  
...and a bill. Dr. Hans Diehl sets  
the stage for the introduction of the  
CHIP model, and explains why  
Western medicine must  
evolve, or collapse under  
its own weight.*

By Hans Diehl, DrHSc, MPH





The accomplishments of modern medicine have been prodigious. We have seen the development of proton accelerators that can zap cancers, surgical robots that can be employed in performing coronary bypass surgeries, and advances in molecular biology and genetics that can open doors to amazing new worlds. And yet, these advances in high-tech medicine have not altered the advances of our modern killer diseases.

### **Western Diseases Boom**

Virtually unknown less than 100 years ago, coronary artery disease and cancers of the breast, prostate, colon, and lungs are now claiming every third and fourth American life, respectively.

In spite of newer and refined forms of insulin and a plethora of bioengineered medications, the incidence rate of the common form of diabetes has gone up 700 percent since World War II, and a recent report from the Centers for Disease Control and Prevention projects that one in three children born today will have diabetes before they die.

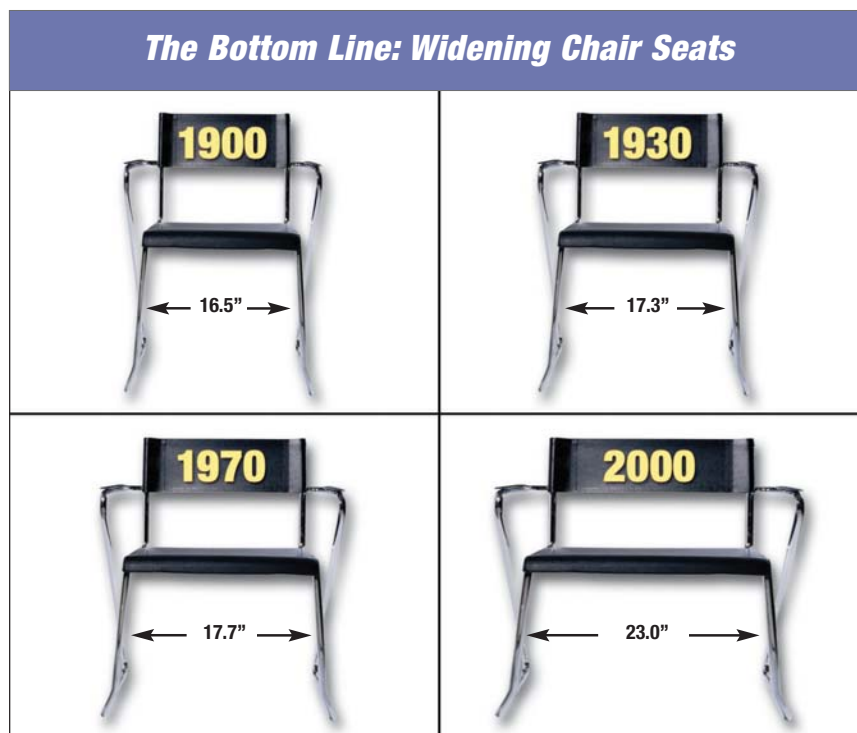
Concurrently, we have seen an enormous rise in the prevalence of excess weight, making it necessary for manufacturers to super-size everything from shirts to pants to gurneys to coffins (*Figure 1* demonstrates what has happened to the standard size chair seat produced by the American Seating Company, especially during the last 30 years). At present, over 45 percent of American adults are overweight, and more than 21 percent are obese. By the year 2010, that obesity number is expected to increase to 50 percent.

### **The Myth Of An Extra 30 Years**

For years we have cherished the belief that we are the world's healthiest society, and that this new epidemic of Western diseases was related to our extended life expectancy. After all, over the last 100 years, the life expectancy at birth has gone up 28 years—from 49 to 77 years of age. Our ancestors just didn't live long enough to die of the Western diseases of "old age."

The often-overlooked fact is that 100 years ago, every sixth baby died before reaching the first year of life, while today

*Figure 1*



*In the last 100 years, nearly seven inches has been added to the width of the average American chair seat. Five inches have been added in the past 30 years alone—concurrent with the rapid rise in obesity rates in America.*

this number has been dramatically reduced thanks to improvements in public health, sanitation, and maternal health. The high mortality rate of newborns and children then greatly shortened the average lifespan 100 years ago. With this in mind, it's sad to see that 65-year-old Americans today may have only gained six or seven years of life expectancy over their counterparts of 100 years ago (see *Figure 2*). Once people survived these early childhood diseases, they had a reasonably good chance of living almost as long as today's seniors, and that in an era when very few medical interventions were available and when less than one percent of the country's Gross Domestic Product (GDP) was devoted to the cost of healthcare.

### Healthcare Costs

In contrast, we are now devoting 15 percent of our GDP, or \$1.6 trillion, to healthcare. This amounts to \$5,500 for every man, woman, and child. By 2013, growing at the current rate, health costs are expected to constitute 18.4 percent of the GDP.

US car manufacturers now pay more for the health costs (insurance premiums) of their workers per car than for the steel that goes into the automobile. These escalating costs contribute to the difficulties of staying competitive in a global economy where many foreign competitors can build their cars in their countries at considerably lower health costs.

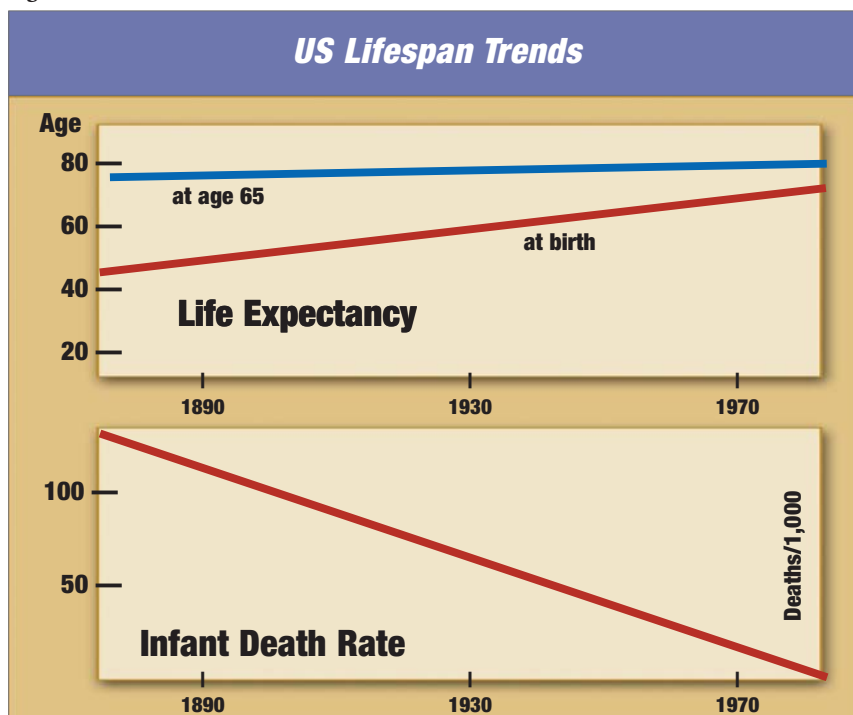
It is obvious: the current system is unsustainable.

### The Interventional Imperative

Senator Hillary Rodham Clinton, in a recent *New York Times Magazine* article (April 18, 2004) addressed the issue of escalating healthcare costs when she asserted that, "Close to a third of the \$1.6 trillion we now spend on healthcare goes to care that is duplicative, fails to improve patient health, or may even make it worse." She recited a recent study showing that for two-thirds of patients who received a \$15,000 surgery to prevent stroke, there was no compelling evidence that the surgery worked.

Ever since the estrogen dilemma—where Premarin, the number one prescription drug in America, was shown to cause more morbidity and death than benefit—other procedures such as bypass

Figure 2



*Average life expectancy at birth has increased dramatically over the past 100 years due to declining infant mortality rates. Life expectancy for 65-year-olds, however, has only marginally increased during the past 100 years.*

surgery (500,000/year at \$75,000 each) and angioplasty (700,000/year at \$25,000 each) have been questioned.

Many physicians and patients don't know—or don't want to believe—that only 10 percent of heart attack patients have their life extended with bypass surgery, and that 15 to 30 percent of grafted vessels close within 12 months after surgery. Some 30 to 45 percent of angioplasty procedures are no longer functional within six months (see *Treating Symptoms or Causes?*, page 9).

Additionally, in the recent article, *In the Statin Era, How Important Are Intense Lifestyle Changes?*, cardiovascular event rates over five years totalled only six percent among those who adhered to a heart healthy lifestyle combined with cholesterol-lowering statin drugs, compared to 21 percent among those in whom lifestyle changes received less emphasis (*Journal of the American College of Cardiology*, 2003; 41:263-72).

Considering that annually 146,000 die from the side-effects of prescription drugs (that's seven percent of all deaths, making prescription drugs the number four cause of death in America), many health policy analysts have felt that medical care has

become a largely business-driven enterprise. Investments in major equipment are made—often to have a competitive edge and to provide market differentiation—that then need to be amortized. Pharmaceutical lobbies and massive marketing efforts may exert tremendous pressures on researchers, physicians, journal editors, government agencies, and the general public. Tragically, many procedures and medications are often accepted and widely used without adequate studies to assess their effectiveness, safety, and long-term impact.

### Medical Care vs. Healthcare

It is clear that the medical-industrial complex offers silver bullets that are all too readily picked up by healthcare providers and consumers alike. Many mistakenly have been sold on the idea that medical care is synonymous with healthcare. Health, however, is largely a matter of personal responsibility that must be exercised within the limits of genetic endowment. Medical care actually has little impact on health (see *Figure 3*).

Health, then, is largely a function of how

people take responsibility for their own actions (see *Prevention or Treatment? The Need for Better Balance* on page 10). Promoting health, therefore, has to do with causes, not with symptomatic or palliative treatment, as helpful as this may be at the time. It has to do with education, motivation and cultural transformation.

With this critical background information in mind, let's look at the nation's number one killer, heart disease—specifically atherosclerosis—in more detail. This information will set the stage for the introduction of the CHIP model and reveal some important insights into disease prevention and reversal.

### **Atherosclerosis: The Silent Killer**

We were born with clean, flexible arteries, and they should stay that way until we die of old age. However, the arteries of most Americans are clogging up with cholesterol, fats, and calcium. This creates vulnerable, soft plaques—they can rupture and clog up suddenly causing most heart attacks and strokes—and stable, hard plaques that can gradually clog up causing progressive angina and degenerative diseases.

This build-up of atherosclerotic plaques

affects the circulatory system in different critical areas. While the clinical expressions of atherosclerosis may carry different disease names, the main underlying pathologic

process is the same. It is atherosclerosis, which reduces tissue oxygenation and leads to degenerative changes.

Atherosclerosis usually begins to develop

**Figure 3**



*According to the Surgeon General, 70 percent of our health status is determined by the lifestyle choices we make—what we eat and drink, whether we smoke and exercise, and how we love.*

## **Treating Symptoms Or Causes?**

**By Robert F. Allen, PhD**

**T**he village well was poisoned and people fell sick. The doctors, nurses, and villagers all ran about buying new beds, giving medicine, and providing lifelong care for those permanently crippled or diseased. They became very adept at treating the ill. They refined the medicines. They discovered new and stronger antidotes. They trained people to care for the sick. They built beautiful buildings to accommodate the chronically ill. Better treatment procedures were invented with marvelous mechanical devices. Emergency services were developed to a remarkable degree of efficiency. There had never been better medical care anywhere. But the patients kept coming and the statistics kept rising because no one treated the source of the problem—the poisoned well.

### **Culturally Promoted Diseases**

Our culture today is a poisoned well. Our culture does not encourage people to be healthy. Even our medical care system is not a health-promoting one; it's a disease care system that focuses on illness after the damage has been done. It has become a salvage operation that largely specializes in the management of victims.

### **Patch-Up Medicine**

We practice patch-up medicine. We spend billions for surgery, coronary care units, kidney dialysis machines, and radiation therapy and chemical treatment for cancer. Our efforts and our

money go to treat the results of our illness culture.

Researchers produce new chemicals and radiation techniques. They try to treat the tumor-filled lungs of smokers on their way to death. Billions are spent for immaculate, intricate, expensive, electronically-monitored, technically-refined coronary care units for the heart attack victims whose bad eating or smoking habits brought them to the crisis. We buy crutches for the crippled. We give tranquilizers to the stressed. We provide artificial hearts, hips, and kidneys for those whose bodies have broken down. We have looked at disease for so long that we have forgotten about health.

### **Cleaning Up**

Health is largely a function of how people take responsibility for their own actions. Promoting health, therefore, has to do with education and cultural transformations.

*The late Robert F. Allen, PhD, was greatly respected as an analytical thinker, competent clinician, and as an author and speaker. He was especially concerned about finding a better balance between medical high tech approaches to Western Diseases and intelligent self-care through personal and social empowerment.*



in the pre-teen years in our society. In fact, in the 1950s, autopsies revealed that 77 percent of American soldiers who died on the Korean battlefield already had significantly narrowed arteries. Their average age was 22. In Korean soldiers, however, the disease process was virtually absent, even among those of 50 years of age.

With so many deaths taking place every year, one would expect more than a murmur of protest from the public, the press, or government agencies. Such a rash of killings by any other means would mobilize the country! Atherosclerosis is not a “natural” way to go. It’s not the inevitable result of the aging process. Large populations in the world are unaffected by it. After WWII, the University of Tokyo’s Medical School had to import atherosclerosed coronary arteries from the US to be able to show its medical students what killed every second American since the disease was so rare at that time in Japan. (With the importation of the rich Western diet, however, also came the Western diseases. After only 20 years, Japan became totally “self-sufficient” in creating narrowed coronary arteries).

With more than 4,000 heart attacks a day in the US, and with sudden death often being the first symptom of underlying coronary artery disease, what are the predisposing conditions? The first solid evidence came during WWII when coronary disease rates in industrialized European countries dropped dramatically, with coronary arteries beginning to open up again, apparently in response to a simple, Spartan diet. Some 15 years later, these plaques, however, returned as the typical affluent US lifestyle (with cigarettes, automobiles, and a rich diet) gradually became the hallmark of many European countries.

Research with monkeys has consistently demonstrated that atherosclerotic plaques can be created and promoted by feeding the animals a Western diet very high in fat and cholesterol, but they can also be reversed by removing these atherogenic dietary stimuli. Let’s look more closely at risk factors for heart disease by examining the well-known Framingham Heart Study.

### **The Framingham Heart Study**

In 1949 the Framingham Heart Study was initiated. The study enlisted 5,209 men and women in a “life and death” study of cardiovascular disease. For more than 55 years, the citizens of Framingham have lived in a scientific fish bowl—their habits, physical characteristics, history, and laboratory tests have been regularly assessed to see if they may relate to the development of atherosclerosis and various circulatory diseases. This monumental research led to the concept of “risk factors” for heart disease which have become as important to heart disease as germ theory has to infectious disease (risk factors for heart disease are outlined in *Figure 4, The Risk Arch*). While examining the Risk Arch, please note:

- (1) The higher on the arch, the more important and consequential the risk.
- (2) The more risk factors, the greater the risk, whereby these risk factors are not additive but multiplicative.
- (3) Some low risk factors, such as age, gender, and heredity, are beyond our control.

## **Prevention or Treatment? The Need for Better Balance**

By Denis P. Burkitt, MD

**I**t’s better to prevent than to repair. Prevention, however, is often more of an effort to achieve because it involves changing people’s habits and attitudes.

### **The Ambulance At The Bottom Of The Cliff**

Western medicine has concentrated its efforts on treatment rather than prevention. The US government spends billions of dollars for a medical system that stations an ambulance at the foot of a cliff to pick up victims who have fallen over the edge and take them to sophisticated medical centers for treatment, instead of spending a few million dollars to erect a fence to prevent people from falling off in the first place. Kicking the cigarette habit, avoiding alcohol, fastening car seatbelts, and eating a more optimal diet of foods-as-grown are all examples of “fences” that could be built around our cliffs to avoid many preventable, self-inflicted Western diseases.

### **The Overflowing Faucet**

Need another example? Two men work long hours mopping up water that overflows from a sink. Their aim and ambition in life is to keep the floor dry. It has never occurred to them that turning off the faucet might enormously reduce the need to mop the floor. Of course, the running water represents the

cause of disease and the flood on the floor the diseases filling hospital beds and doctors’ offices.

Medical students learn the standard techniques of floor mopping but they receive very little instruction in how to turn off running faucets. Industrial enterprises provide the best mops human ingenuity can devise in the form of drugs, surgical techniques, and space-age technology. For these we must be grateful. But, let them not blind us to the need to wipe out the causes of our Western diseases at their source!

The analogy is plain. There is, and always will be, a flood on the floor, the presence of disease in the world, which must be dealt with by the best means possible. But how much better it would be to turn off the faucets *as well as* mop the floor rather than ignoring the former while concentrating on the latter.

Much testing remains to be done regarding the role of diet in preventing and reversing disease, but our knowledge is sufficient and we can and must act. In addition, we have an obligation as a Western Society to warn the countries of the developing world, which are eager to adopt our rich Western diet, that if they do, they do so at their peril!

*The late Dr. Burkitt, from London, England, was world-renowned for his discovery of the Burkitt Lymphoma and for the promotion of a diet higher in fiber yet lower in fat.*

- (4) Most of the controllable risk factors are under the control of our diet.

Once risk factors are established, they can be linked with additional research and *Figure 4*

the chances of developing heart disease can be estimated. For example, in *Figure 5* man “A” at age 35 is 140 times more likely to develop a heart attack over the next six

years than his healthy contemporary.

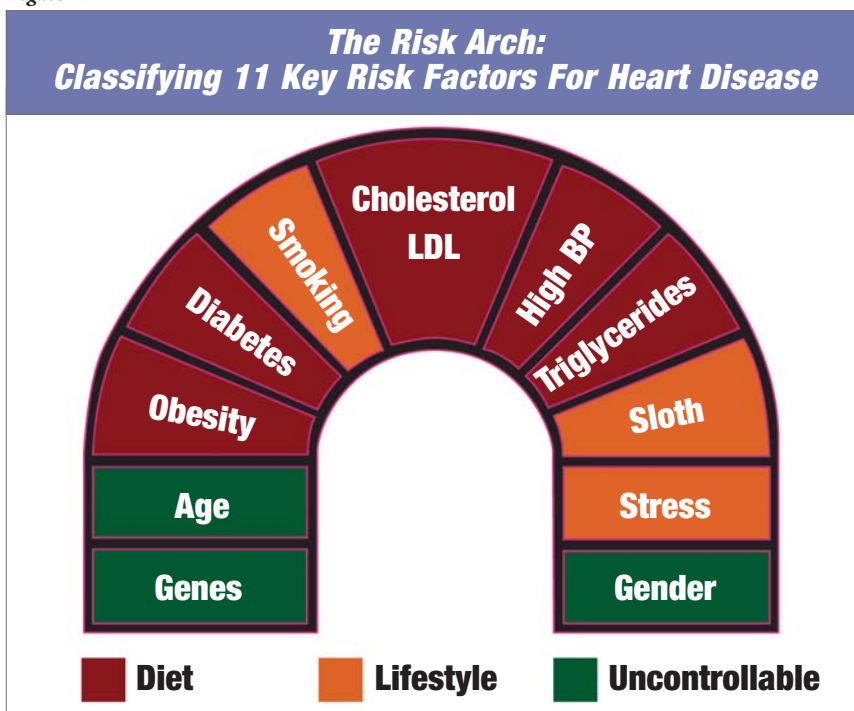
Multimillion dollar studies funded by the National Institutes of Health have shown that 63 to 80 percent of all major coronary events before age 65 could be prevented if Americans would lower their cholesterol (less than 180 mg%), their systolic blood pressure (less than 125), and quit smoking. These simple changes in lifestyle would do more to improve the nation's health, productivity, and vitality than all hospitals, surgeries, and medical procedures combined.

### ***The Connection Between GDP And Western Diseases***

Looking at the global distribution of Western diseases (with many being prominently related to atherosclerosis), one cannot help but see a strong economic gradient: the higher the GDP, the greater the prevalence of Western diseases. One need only look at the recently completed *China Diet Study* to see how strong the connection really is.

The massive China Diet Study, masterminded by T. Colin Campbell, PhD, of Cornell University, clearly showed two clusters of diseases in China. Populations surveyed near metropolitan centers displayed high rates of “diseases of affluence” such as coronary artery disease, stroke, hypertension, diabetes, osteoporosis, and cancer of the breast, prostate, lung and blood. Rural populations, in contrast, suffered from “diseases of poverty” such as pneumonia and tuberculosis, digestive diseases, cancer of the stomach and liver, and infectious and parasitic diseases. While the diseases of affluence correlated closely with the level of economic development and the abundance of processed foods, fast-foods, and animal products high in fat and protein (eating meat has become a status symbol and a sign of prestige), the diseases of poverty were predominantly intertwined with poor sanitation, nutritional deficiencies, and poor food quality due to a lack of refrigeration.

The researchers concluded, “Chinese counties with a more affluent lifestyle (a richer diet, more smoking, and less exercise) showed a clear shift from diseases of poverty to diseases of affluence.” But, they said, “Diseases of affluence are not inevitable. A society that can afford sanitation, refrigera-



*The higher on the arch, the higher the contribution of the risk factor to heart disease and its underlying atherosclerosis. Five of the eight controllable risk factors are largely under the control of diet.*

*Figure 5*

<b>Risk Of Developing Heart Disease According To Absence Of Risk Factors (age 35 years)</b>		
<b>Risk Factor</b>	<b>Male “A”</b>	<b>Male “B”</b>
Cholesterol (mg%)	310	150
Blood Pressure	160/90	110/75
Smoking	Yes	No
EKG	Positive	Negative
Diabetes	Yes	No
Risk of developing heart disease within six years	<b>140 times</b>	<b>1 time</b>

*Because of the difference in the presence of risk factors, Male “A” has a 140 times greater chance of developing heart disease within six years than his contemporary. (The Framingham Heart Study)*

tion, and abundant food may yet conquer these diseases of affluence by simplifying its diet and by eating more foods-as-grown.”

### Changes In Diet Composition

Developing countries have to rely predominantly on foods-as-grown. They rely basically on corn and beans, potatoes and yams, wheat and rice, and plenty of fruits and vegetables. These inexpensive yet nutritionally-rich plant foods provide more than enough protein, modest amounts of fat and sugar, and plenty of complex carbohydrates, the body's preferred and clean-burning fuel to meet energy requirements.

As the GDP increases, dietary energy sources change drastically (see *Figure 6*). Developing countries rely mostly on unrefined complex carbohydrate foods high in starch, which account for 70 percent of total calories (shown in green) with very few calories coming from fats, oils, sugars, and animal products. On the other hand, the diet of affluent countries is largely composed of fats and oils (36 percent of calories) and sugars (24 percent), shown in red and yellow, respectively. And their complex carbohydrates are usually refined, white flour products like pies, pastries, pastas, and pizzas, crowding out the nutritionally-rich unrefined complex carbohydrates.

Diets incorporating foods-as-grown are naturally very low in fat, oil and grease, and salt and sugar, and usually very low in animal protein, thus almost devoid of cholesterol and saturated fat, yet they are high in fiber.

As these countries become more affluent, however, potatoes are turning into Pringles®, corn into Doritos®, wheat into Zingers® and beans and grains into sirloin steaks. With food technology being able to create new taste sensations on one hand, and with advertising being able to create a mass market on the other, the diet composition undergoes a major overhaul—the largely unrefined complex carbohydrates become a minority player. In their stead, calorie-dense, processed foods—usually high in sugar (simple carbohydrates) and fats—as well as meats, sausages, eggs, and cheese high in fat, calories, and cholesterol, become the dominant energy carriers.

### The Food Revolution

Even in our country, food just isn't the same as it was some 100 years ago. Back then, the American diet consisted largely of foods-as-grown, coming mostly from local gardens and nearby farms. It was supplemented with a few staples from the general store and some meat from range-

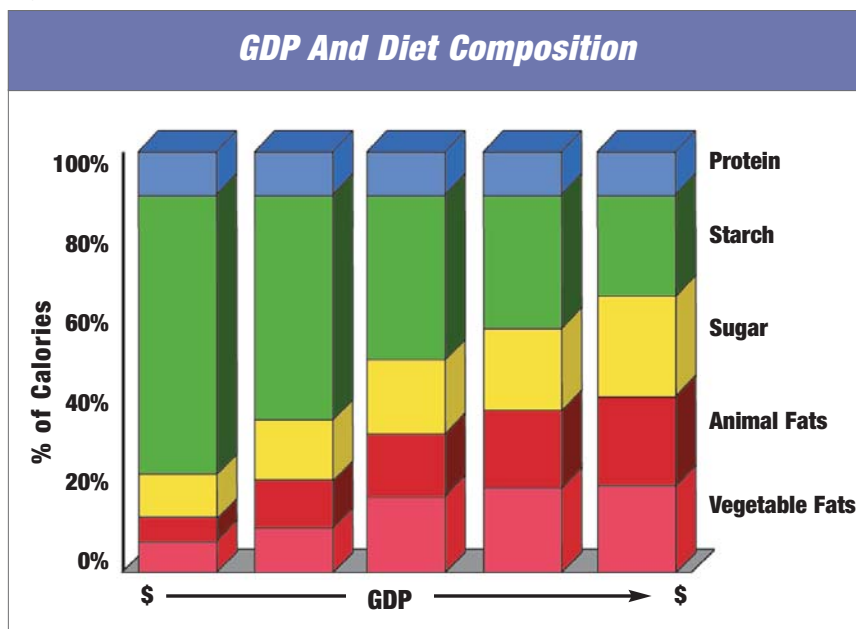
fed cattle. Our great-grandparents didn't have 30,000 slickly packaged, cleverly promoted products waiting at the local supermarket, or 85,000 fast-food restaurants spending several billion dollars advertising “take-out” service. Families in those days sat at their own tables and ate their freshly-cooked food and home-baked bread. But times and tastes and serving sizes have changed. Many of us spend 60 percent of our food dollars “eating out.” Our livestock is fattened in feedlots where lack of exercise, antibiotics, and “growth enhancers” produce bigger cattle faster, and juicier meat with about twice the fat as range-fed cattle. Farm produce is processed, refined, concentrated, sugared, salted, and chemically engineered to produce taste sensations which are rich in calories but poverty stricken in nutritional value. Advertising and marketing have created a demand that produces big profit margins and fat bodies.

Food-as-grown is nutritionally balanced. It doesn't need nutrition labels. Refinement, however, strips these foods of most of their fiber and nutrients. Processing adds calories, subtracts nutrition, and contributes myriads of chemical additives. Strip seven pounds of sugar beets of their bulk, fiber, and nutrients, for instance, and you get one pound of “pure” sugar! Some 50 percent of the calories eaten are now empty calories, almost totally devoid of any significant nutritional value. No wonder many Americans are overfed and undernourished!

Cooked, whole grain cereals, rich in fiber, expand in your stomach giving a sensation of fullness, and they save you money. On the other hand, presweetened cereals crumble and shrink to almost nothing, and they cost you, pound for pound of grain, 8 to 10 times more.

The least nutritious foods with the most sugar are the most widely advertised. The enormous resources of advertising go far towards the destruction of our more sensible eating habits. And don't forget that meat is the single largest source of fat in the US diet and its excess protein may contribute to kidney disease, gout, and osteoporosis. But even more serious is the heavy load of saturated fat that most animal protein foods carry, which causes the liver to go into overdrive in making excessive cholesterol.

Figure 6



As the GDP increases from developing countries on the far left to the affluent countries on the far right, the dietary energy sources change drastically.



**“The concept that Western diseases are lifestyle related and therefore potentially preventable and reversible is the most important medical discovery of the 20<sup>th</sup> century.”**

**—Denis Burkitt, MD**

No wonder the Surgeon General warned in *Nutrition and Health*: “For the two out of three adult Americans who do not smoke or drink excessively, one personal choice seems to influence long-term health prospects more than any other: what we eat.”

### ***Lifestyle Medicine Approach***

So what would happen if people really simplified their diet, did something about their smoking, and started an exercise program? Since 1975, the Pritikin Longevity Center has had more than 75,000 people attend its residential one-to-four-week lifestyle change-oriented program now at Aventura, Florida. More than 90 clinical reports sponsored by the Pritikin Research Foundation have been published in peer-reviewed journals demonstrating some of the advantages of a lifestyle medicine approach over the high-tech and pharmaceutical approaches, both in clinical outcomes and cost-effectiveness.

While the possibility of atherosclerotic lesion regression in humans had been suggested by WWII data, Nathan Pritikin's own post-mortem showed that he had the arteries of a teenager. “In a man 69 years old,” wrote pathologist Jeffrey Hubbard, MD, “the near absence of atherosclerosis and the complete absence of its effects are remarkable.”

Building on Pritikin's work, Dean Ornish, MD, a young Harvard-trained cardiologist, published in 1990 the results of his randomized clinical trial with coronary patients. Employing a very simple, very low-fat, unrefined vegetarian diet coupled with exercise, stress management, and group support, he demonstrated with PET-

scans and angiography that the “majority of atherosclerotic lesions were indeed subject to regression regardless of the patient's age.”

Since then, his pioneering work has been duplicated, established, and extended in many clinical research centers around the world. For instance, Caldwell Esselstyn, Jr., MD at the Cleveland Clinic, has demonstrated in a 12-year study that diet alone (a simple, natural, vegetarian diet, very low in fat, sugar, and salt, yet high in fiber) can reverse coronary artery disease and reduce the incidence of subsequent coronary events to zero! Furthermore, Richard Fleming, MD, has shown with nuclear studies the dramatically improved coronary blood flow to the heart muscles in response to a simple, foods-as-grown diet.

### ***Making The Change***

Today, more than ever, we have become victims of our own lifestyle. The contribution of the medical care system to the health status of Western nations is marginal, since it can do little more than serve as a catchment net for those who have become victims of their own choices. The greatest health benefits are likely to accrue from efforts to improve the health habits of the American people instead of further medicalization of society. The research data is in. We know how to create many of our common Western diseases, and we know how to reverse them. But how do we get the word out? How do we motivate people to assume more responsibility for a health-affirming lifestyle? The rest of this issue will answer this question and outline the CHIP model for health, a compelling prescription for enhancing the well-being and vitality of all Americans. ★

### **ABOUT: Hans Diehl, DrHSc, MPH**

As Chairman of Lifestyle Medicine Enterprises and Founder of CHIP, Hans Diehl, DrHSc, MPH is Director of the Lifestyle Medicine Institute at Loma Linda, California. His pioneering efforts with Nathan Pritikin and Dr. Denis Burkitt have shown compellingly that many of today's diseases are truly reversible through some simple lifestyle changes. As a best selling author, researcher, dynamic speaker, and top-ranking motivator, he has lectured to whole communities, corporations, and governments, and has presented seminars on four continents.

The CHIP program itself was born in the winter of 1988 when Dr. Diehl was invited to conduct a 4-week lifestyle change program in Creston, British Columbia, a community of about 5,000. Some 400 people accepted the challenge to take more responsibility for their health. They became charter members of the first CHIP program. Following the Creston experience, Dr. Diehl went on to conduct multiple live programs in Canada, India, and the United States.



# Good Medicine

CHIP helps individuals get healthy by choice—not by chance.

By Hans Diehl, DrHSc, MPH

My astonishment and praise for the ambitious North Karelia Project knew no bounds when I saw its first publications during graduate school. I read about a young epidemiologist, Dr. Pekka Puska, who wanted to help the Finnish province of North Karelia, known for its “valleys of beautiful widows.” Behind this ominous distinction hid the fact that many men died in their forties and fifties from coronary artery disease. This young scientist, against all odds, set out to change this fact. And he did. He changed not only the mortality from heart disease and lung cancer in Karelia, but in due time, he changed it all over Finland (see *Figure 1*).

It was the North Karelia Project that inspired me to think of a community approach to improving health. Dr. Puska’s report laid the foundation for my commitment to CHIP as a community-based intervention program to combat Western killer diseases.

Similarly, my appreciation for the pioneering work of Nathan Pritikin knows no bounds as I look back over my years as Director of Education and Research at the Pritikin Longevity Center. It was Nathan Pritikin, an inventor with numerous patents, who after being diagnosed with coronary artery disease at the age of 41, started doing his own research and became convinced that people with cholesterol levels of under 160 mg% rarely ever developed this disease. In the process, he also discovered that people not afflicted with many of our Western diseases usually were physically active and followed a very simple whole-foods diet, high in unrefined, fiber-rich carbohydrates and very low in fat, particularly saturated fat from meat and dairy foods.

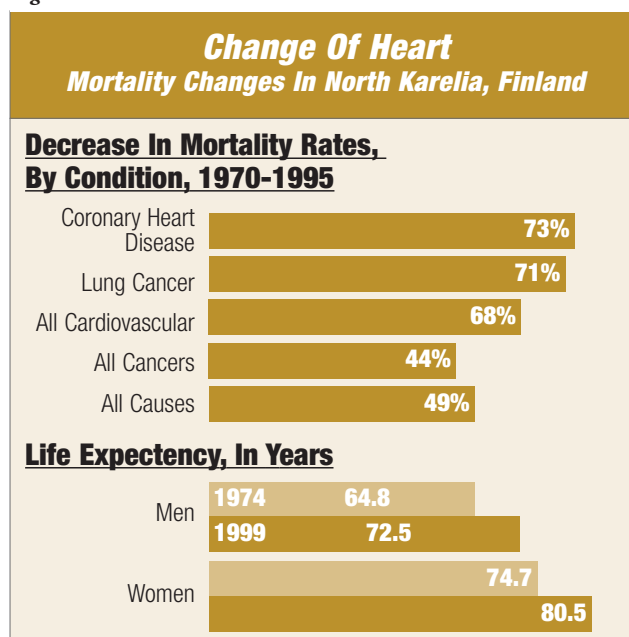
As Pritikin shifted to this much simpler diet of whole grains, legumes, fruits, and vegetables, his cholesterol level of 300 plummeted to less than 130 mg%. Two years later, a new electrocardiogram showed that his coronary insufficiency had disappeared. His test results were normal.

Pritikin made a quantum leap with his discovery that the very lifestyle that can provide virtual immunity to many of our common chronic diseases can also arrest if not reverse them. While his initial results as shown on *60 Minutes* defied the medical establishment, more than 90 peer-reviewed research papers published over the last three decades have validated the efficacy of his lifestyle medicine approach.

## The Birthing Of CHIP

Concerned with how best to bring these concepts to society-at-large, and taking my cues from Dr. Puska’s community-based intervention model, I began to understand that advocated lifestyle changes without thorough education, skill development, and a supportive infrastructure would be doomed to failure. I also learned that it was necessary to find a way to integrate the medical and public health models, and to take advantage of an ecological-social concept where people would learn in a social setting as a group and feel supported by communal infrastructures.

Figure 1



*Dr. Puska’s Community-based intervention model reduced mortality rates throughout Finland and served as inspiration for the development of CHIP. (Source: World Health Organization; North Karelia Project.)*



Our first CHIP program, conducted in the small Canadian town of Creston, British Columbia, attracted more than 400 people in the midst of winter. Among them were Bob and Theresa Anderson, who became an inspiration to thousands of people (see *A CHIP Success: The Andersons* on this page).

The clinical results were so compelling that the program leapfrogged—largely by word of mouth—from one town to the next, ultimately ending up in Ottawa, Canada's capitol, where it was presented to the Canadian Parliament and to the Minister of Health of the Province of Ontario.

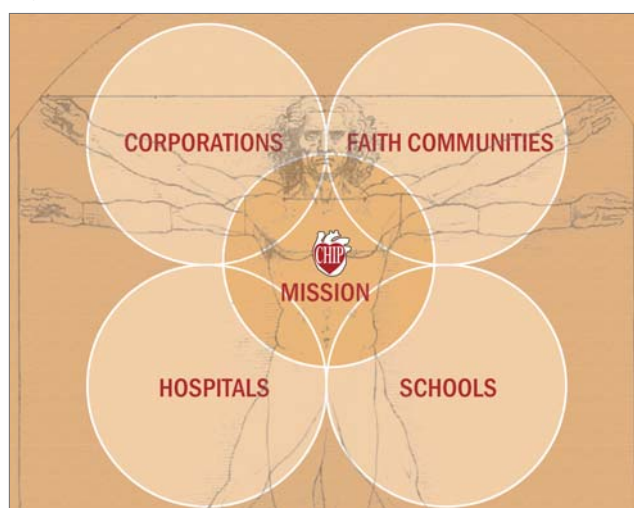
Some four years ago, in an effort to meet the demands, the CHIP program was videotaped, and training and certification programs for facilitators were established.

### **The CHIP Mission— The da Vinci Model**

CHIP's mission is to stimulate a "national health transformation" from the "inside-out" by educating, motivating, and inspiring people from all walks of life "to be healthy by choice, not chance." Here's a detailed description of the CHIP da Vinci model shown in *Figure 2*.

- At the core of the model is a human being representing every person who has had a health transformation as a result of the CHIP program.
- Radiating "inside-out" from the CHIP heart are the domains—hospitals, corporations, faith-communities, and schools—through which CHIP can be accessed.
- Unifying these channels are the supportive infrastructures of a community, such as foodservice providers (restaurants, grocery stores), exercise facilities, health-care providers, etc.
- The outcome of CHIP activities results in a transformed community.

**Figure 2**



*The CHIP da Vinci model: The CHIP mission is to inspire national health transformation by working with hospitals, corporations, faith communities, and schools to achieve better health.*

- Transformed communities become the model for a national health transformation.

### **The CHIP Program**

CHIP is an educationally intensive lifestyle intervention program with more than 40,000 graduates worldwide. Endorsed by the Physicians Committee for Responsible Medicine (PCRM) and the Center for Science in the Public Interest (CSPI), both headquartered in Washington, DC, the CHIP program focuses on developing a greater measure of intelligent self-care involving a clearer understanding of the nature and etiology of heart disease, its epidemiology, and its risk factors (see pg. 11).

The program aims at a marked reduction of coronary risk factor levels through the adoption of better health habits and lifestyle choices. The goal is to facilitate disease reversal by lowering blood cholesterol, triglycerides, and blood sugar levels by reducing excess weight, lowering high blood pressure, enhancing daily exercise, and eliminating smoking.

The CHIP curriculum is carefully structured (see *17 CHIP Video Lecture Topics*, pg.17) and emphasizes the prominent role diet plays in the etiology and reversal of many chronic diseases.

Risk factor levels are carefully assessed before the educational intervention begins, immediately following the completion of the 40-hour educational program, and again after three and 12 months. The results by Diehl, Aldana, and Englert have been pub-

### **A CHIP Success: The Andersons**

**B**ob and Theresa Anderson attended the Creston CHIP project. Bob, 66, had retired as a building contractor because of debilitating arthritis in his lower back. "I could hardly make it out to the mailbox, 200 feet from my front door," he recalls 13 years later. "I had no energy, I was 60 pounds overweight, smoked three packs of cigarettes a day, and was always short of breath."

Theresa's health wasn't much better. She suffered from high blood pressure and diabetes, and was quite overweight and extremely depressed. Then Dr. Diehl came to town with his simple message. "Our diets are killing us. Our excesses in meat, rich dairy products, sugar, alcohol, salt, and tobacco—all the good things in life—must go or we'll eat and drink ourselves into early graves."

The Andersons decided to give it a try. They dumped their vodkas down the kitchen sink and cleaned out their fridge. They burned their cigarettes in the fireplace and started walking. First just one block, then two, three, five, and they were on their way. Following the CHIP seminar, they enrolled in meatless cooking classes. Bob's arthritis disappeared. Theresa's blood pressure, cholesterol, and blood sugar levels returned to normal. Both took up bicycling, shed 50 pounds, and three years later, at age 69, Bob cycled 3,210 miles from Creston to Ottawa in 60 days. He arrived in time to initiate the Ottawa CHIP project. With extensive daily television and newspaper coverage, Bob had become an instant Canadian treasure and an inspiration to thousands of people.

“CHIP is based on the findings of the US Surgeon General that some 70 percent of our so-called Western diseases are largely ‘lifestyle-related.’ **These diseases relate to our rich diet, our lack of exercise, our use of cigarettes, alcohol, and caffeine, our level of stress, and the quality of our support.**”

lished in the *American Journal of Cardiology* (1998), the *Journal of Occupational and Environmental Medicine* (2002) and the *Journal of Preventive Medicine* (2004).

### **Dietary Lifestyle**

The *CHIP Optimal Diet* emphasizes largely unrefined foods-as-grown. These foods (like grains, legumes, vegetables, and fresh fruits), usually high in unrefined complex carbohydrates, are encouraged to be eaten freely.

Such a natural whole-food diet—very low in fat, animal protein, sugar, and salt, yet high in fiber, antioxidants, and micronutrients, and virtually free of cholesterol—is in stark contrast to the typically rich Western diet (see *The CHIP Optimal Diet*, pg. 19). Please note when viewing that the arrows pointing to a decrease and increase for certain foods are dynamic in nature, indicated by the broken and progressive arrow design. CHIP participants in greatest need of clinical improvement do best by making the greatest dietary changes. CHIP, then, does not follow an ideologically prescribed dietary dogma. On the contrary, while it offers some optimal dietary reference points, it allows people to choose their level of implementation based on their motivation, clinical status, and readiness.

### **The CHIP Prescription**

CHIP is based on the findings of the US Surgeon General that some 70 percent of our so-called Western diseases are largely “lifestyle-related.” These diseases relate to our rich diet, our lack of exercise, our use of cigarettes, alcohol, and caffeine, our level of stress, and the quality of our support. The diseases resulting from this lifestyle include heart disease, stroke, hypertension, diabetes, gout, arthritis, overweight, certain adult cancers, impotence, diverticular disease, constipation, heartburn, and gall bladder disease.

## **17 CHIP Video Lecture Topics**

- #1 Modern Medicine: Miracles, Medicines, Money & Mirages:** The miracles and limitations of high-tech medical approaches in dealing with lifestyle-related diseases.
- #2 Portrait of a Killer: Onslaught From Within:** Atherosclerosis, the culprit in many lifestyle diseases.
- #3 Stalking the Killer:** Reviewing the risk factors for coronary heart disease.
- #4 Eat More and Weigh Less:** Understanding energy balance, concentrated calories, and implementing guidelines for healthy, sustained weight loss.
- #5 Going Up in Smoke:** Smoking—the most preventable cause of death and its relation to heart disease.
- #6 The Magic of Fiber:** The role of fiber in preventing and reversing lifestyle diseases.
- #7 Reversing Hypertension and Diabetes:** Changing the lifestyle determinants of high blood pressure and diabetes.
- #8 Effective Cholesterol Control:** Dietary factors that prominently reduce blood levels of cholesterol.
- #9 Fats in the Fire:** The role of excessive fat intake in lifestyle diseases.
- #10 Fit at Any Age:** Benefits of regular exercise in preventing and arresting disease.
- #11 Boning Up on Osteoporosis:** Causes and prevention of this so-called “disease of aging.”
- #12 Lifestyle and Health:** Clinical studies that demonstrate how lifestyle choices are related to health and the reversibility of many chronic diseases.
- #13 The Optimal Diet:** Positive dietary guidelines for the prevention and reversal of Western diseases.
- #14 Diet and Cancer:** Dietary factors in the development and prevention of common cancers.
- #15 Atherosclerosis of the Mind:** The importance of adaptability and attitude in achieving and maintaining optimal health.
- #16 The Gift of Forgiveness:** How a spirit of forgiveness enhances emotional and overall health.
- #17 Building Self Worth:** The development, preservation, and role of self worth in a healthy person.

## Rockford CHIP

Rockford, Illinois is a good example of how CHIP works from a “nuts and bolts” perspective. The CHIP program is community-based, works closely with referring physicians, schools, and local restaurants, and sustains adherence to the program guidelines through an active CHIP alumni support organization.

The CHIP program conducted in Rockford is hosted by the SwedishAmerican Health System. The goal is to graduate a “critical mass” of 7,000 residents, (10 percent of the population above 40 years of age), and to make Rockford a model city of health. I either conduct the program myself as a “live” program, or it is conducted via a state-of-the-art video set with trained facilitators. The program either runs for four weeks, where people meet from Monday through Thursday for two hours, or it runs for eight weeks with people attending twice a week. The CHIP program is

currently conducted in more than 200 cities via the video program and is offered through faith-based communities, licensed CHIP leaders, and through arrangements with corporations, hospitals, and schools (be sure to check out *Healthy By Choice, Not Chance: Rockford Residents Pitch The Junk Food*, on this page).

Wherever CHIP—as the flagship of the Lifestyle Medicine approach—is conducted, the clinical feedback is consistent: people take charge of their lifestyle, and their healthy lifestyle takes care of them.

Once people understand the cause and effect relationship between lifestyle choices, health, and disease, many will opt no longer for the good life but for the best life possible. Church people, employees, corporate executives, and hospital administrators everywhere are making new commitments towards health, because while they realize that health may not be everything, they also recognize that without health, everything is nothing.★

## Healthy By Choice, Not Chance: Rockford Residents Pitch The Junk Food

**P**articipants of the CHIP Program in Rockford, IL, have made the commitment to be “healthy by choice, not chance” by pitching their junk food and adopting healthier lifestyles. Below are short descriptions of these individuals, and brief insights into what the Rockford CHIP Program has done for them.

1. Sheila Snider, 59, of Rockford. A CHIP alumni organization Director, Snider lost 52 pounds and eliminated allergies and sinus headaches.
2. Karen Petty, 61, of Rockford. A CHIP Operations Coordinator, Petty lost 80 pounds, normalized her blood pressure, quit asthma inhalers, and no longer has heel pain.
3. Carla Vedro, 29, of Rockford. The librarian/student gained more energy as well as a small cholesterol drop, from 188 to 165. Vedro is holding her infant daughter, Isabella.
4. Marcia Huber, 45, of Loves Park. Huber, who co-owns a palate manufacturing business with her husband, lost 45 pounds and improved her health enough to quit her medications for diabetes, high blood pressure, asthma, allergies, sleep apnea, and acid reflux.
5. Richard Mowris, 51, of Rockford. Mowris, VP of Administration at Rockford Products, gained more energy, lowered his cholesterol from 165 to 130, lost 10 pounds and saw his blood pressure drop 10 points.
6. Mary Mowris, 49, of Rockford (wife of Richard Mowris). This school nurse lost 10 pounds and slightly lowered her cholesterol, blood pressure, and blood glucose levels.
7. Sue Junya, 51, of Byron. A pharmacist and co-owner of Thai Cuisine, a Rockford restaurant that also serves CHIP-approved food, Junya has dramatically reduced the amount of insulin she needs to control her diabetes. Also, her cholesterol has dropped 50 points.
8. Bradley Huber, 48, of Loves Park (husband of Marcia Huber). Huber lowered his cholesterol from 220 to 198 and says he now feels better.



9. Barbara Richardson, 55, of Rockford. Richardson, a lab assistant, lost 31 pounds and says the arthritis pain in her knees disappeared. She now feels empowered and is in better overall health.



*This feature originally appeared in the Chicago Tribune, May 19, 2002. It is used here with permission.*



## The CHIP Optimal Diet

# Eat For Health

## Basic Guidelines For A Lifetime Of Good Eating

### Eat Less:



#### Fats and Oils

Strictly limit fatty meats, cooking and salad oils, sauces, dressings, and shortening. Use margarine and nuts sparingly. Avoid frying (sauté instead with a little water in non-stick pans). Especially avoid saturated and trans fats (cookies & crackers).



#### Sugars

Limit sugar, honey, molasses, syrups, pies, cakes, pastries, candy, cookies, soft drinks, and sugar-rich desserts like pudding and ice cream. Save these foods for special occasions.



#### Cholesterol Foods

Progressively eliminate meat, sausages, egg yolks, and liver. If used, limit dairy products to low-fat cheeses and nonfat milk products. If you eat fish and poultry, use them sparingly.



#### Salt

Use minimal salt during cooking. Banish the salt shaker. Strictly limit highly-salted products like pickles, crackers, soy sauce, salted popcorn, nuts, chips, pretzels, and garlic salt.



#### Alcohol

Avoid alcohol in all forms, as well as caffeinated beverages such as coffee, colas, and black tea.

### Eat More:



#### Whole Grains

Freely use brown rice, millet, barley, corn, wheat, and rye. Also eat freely of whole-grain products such as breads, pastas, shredded wheat, and tortillas.



#### Tubers and Legumes

Freely use all kinds of potatoes and yams (without high-fat toppings). Enjoy peas, lentils, chick peas, and beans of every kind.



#### Fruits and Vegetables

Eat several fresh, whole fruits every day. Limit fruits canned in syrup. Limit fiber-poor fruit juices. Eat a variety of vegetables daily. Enjoy fresh salads with low-calorie, low-salt dressings.



#### Water

Drink eight glasses of water a day. Vary the routine with a twist of lemon and occasional herb teas.



#### Hearty Breakfasts

Enjoy hot, multi-grain cereals, fresh fruit, and whole wheat toast. Jumpstart your day.

### Diet Comparison

	US Diet	CHIP Optimal Diet
Fats & Oils	37%*	<15%*
Sugar	35 tsp/day	<10 tsp/day
Cholesterol	400 mg/day	<50 mg/day
Salt	15 gm/day	<5 gm/day
Fiber	12 gm/day	>40 gm/day
Water (fluids)	minimal	8 glasses/day

\*of total calories



# Change of Heart

*Dr. Roger L. Greenlaw has been practicing medicine for 30 years. During that time, he has undergone personal and professional transformation, and spent his energies putting the word “health” back into healthcare.*

***By Roger L. Greenlaw, MD***



### ***What I Learned In Medical School***

When I was in medical school in the 1960s, most of my colleagues wanted to be “specialists.” We wanted to be doctors involved in patient care, teaching, and research specializing in areas like diabetes, hepatitis, renal failure, or cancer. The days of the general practitioner were gone. Disease was a “black box,” and the light of research was shining ever deeper into the darkness exposing the microscopic and physiologic causes of disease. It was just a matter of time until our diseases would be cured. The role of science in medicine and specialization was good and “we were going to make a difference.” Over the years, however, our enthusiasm for stamping out disease has gradually given way to a sense of impotence against the backdrop of an avalanche of debilitating chronic diseases and a new set of problems, from antibiotic resistance, to drug toxicity, to disease progression.



### Treating Symptoms vs. Causes

After my fellowship in gastroenterology at Yale, and doing all the exciting interventions in my subspecialty over the next 10 years, it began to dawn on me that my medical interventions—as important and rewarding as they were to me—rarely ever affected the incidence rates of the diseases I saw. To influence these, I had to reach my patients earlier and I had to help them to make better lifestyle choices, especially in their diet.

But I had to face a problem. I observed two groups of patients: the first group, in the throes of developing the disease as evidenced by the emergence of risk factors, didn't feel bad enough yet to get motivated to make the needed lifestyle changes.

The second group, recently diagnosed with the evidence of disease, felt as if they had crossed over a line. They felt that they would remain in “medical therapy” for the rest of their lives and any efforts to make lifestyle improvements to alter the course of their disease would be too little, too late.

No matter how much time or effort I invested in my personal patient encounters, I didn't feel very successful in motivating them to make sufficient lifestyle changes that may have prevented and arrested their diseases. Was there no way out?

### Transformative Moment

In 1990, Dean Ornish, MD, published the results of his lifestyle intervention trial where he convincingly showed that coronary artery disease could be reversed through lifestyle change alone—without medications or surgery (*Lancet*, 1990; 336:129-33).

During the same year, Louis Sullivan, MD, Secretary of Health and Human Services (HHS), announced that the causes of premature death and major illness in Americans could be attributed largely to lifestyle choices (70 percent). Heredity (10 percent), environmental factors (10 percent), and lack of medical treatment (10 percent) played only minor roles (see figure 3, pg. 9).

Wasn't this the answer to the “too early, or too late” syndrome? The work of Ornish and Sullivan suggested that if people made lifestyle changes, debilitating chronic diseases could be prevented and even reversed!

I began to see the prospect of disease reversal, an opportunity to turn the disease around after it had clinically manifested itself. I saw the prospect of being able to help my patients lower their blood pressure and cholesterol, prevent that second heart attack, reduce in diabetics their dependence on pills and shots and help them avoid the complications of blindness, amputations, and kidney disease, and to open up the coronary arteries once more—and largely through some simple yet deliberate lifestyle changes!

Through his five-year randomized clinical trial, Ornish compellingly demonstrated that patients willing to make his recommended lifestyle changes in the areas of nutrition, exercise, and stress management within the setting of good social support, could both lower coronary risk and actually reverse established coronary artery disease. Best of all, Ornish showed that the clinical turnaround was not determined by age or disease severity, but rather by the degree of adherence to the healthier lifestyle (*JAMA* 1998; 280:2001-7).

Then, in 1995 and 1999, Esselstyn's long-term study was published confirming Ornish's work. An eminent surgeon at the Cleveland Clinic, Caldwell Esselstyn, Jr., MD, worked with 18

“The human body then is not the solid structure issued at birth that must last until death that I observed during anatomy class in medical school. Rather, the human body is always in flux, more like a river—continually flowing and changing.”

inoperable coronary patients. He placed them on a very simple diet of whole foods, got their blood cholesterol below 150 mg%, and over the next 12 years, showed angiographic evidence that the artery narrowing disease process had been arrested, and in 13 patients, reversed. The arterial plaques had begun their melt-down.

What did this mean in practical terms? If a 35-year-old man told me that all the men in his family had died of heart attacks by the age of 50, and asked for advice on how to prevent his own coronary, the answer now would be, “Follow a healthy diet, get regular exercise, practice stress management skills, and immerse yourself in an environment of strong social support.” If that same man came back to me at age 49 saying, “I did not follow your advice; I have had two heart attacks, six angioplasties, two stents, and two bypass surgeries, and I have been told there is ‘nothing else that can be done for me,’” I could now offer him essentially the same advice—“Your disease is shown to be reversible in the majority of cases, even at this late stage. But you have to make some lifestyle changes. You have to eat a healthy diet, get your daily exercise, practice stress management skills, and immerse yourself in a supportive environment.”

The first principle of lifestyle medicine had emerged: *Lifestyle change that offers disease prevention also works as effective treatment for advanced disease.*

### How Disease Reversal Works

How does this disease reversal process work in terms of our physiology? The answer can be found in the body's constant renewal process. As a gastroenterologist, I observe that we grow a new stomach lining every seven days. The dermatologist confirms a new layer of skin can appear every 30 days. The surgeon who removes half the liver after injury in a motor vehicle accident is not surprised to see a CAT scan revealing a normal sized liver that has regenerated within weeks. And the hematologist observes the body creating an entirely new set of red blood cells every 120 days at the rate of 1.5 million per day. In fact, atomic tracer studies have shown the body to be 98 percent new material at the atomic level every year, with nearly a 100 percent replacement every five years. The human body then is not the solid structure issued at birth that must last until death that I observed during anatomy class in

medical school. Rather, the human body is always in flux, more like a river—continually flowing and changing. We are renewed from what we eat, to support what we do within the context of our genetic make-up.

As my treatment paradigm shifted, my personal lifestyle became affected, too. I began to make lifestyle changes that demonstrated these newly discovered concepts in my own life.

But as I shared them with my patients, I may have found one person a week who was interested. Over the next six months, however, I was finding one or two people a day who were ready to make changes. And by the end of the year, it seemed that over half of my patients every day were responding to the idea of self-care.

My own transformation, and the new preventive medicine skills I was acquiring in lifestyle medicine, now helped many of my patients who initially were poorly motivated or just not interested, get on track.

### ***The SwedishAmerican Center For Complementary Medicine***

Now armed with information that was transformative, and with a healthier lifestyle of my own, I was excited to approach my colleagues and my hospital in search of a formula to bring lifestyle medicine to daily practice and “to put health back into healthcare.”

In the late 1990s, under the leadership of Robert B. Klint, MD, (see the *Klint Memorial* on the inside back cover of this issue) and senior leadership at the SwedishAmerican Health System, a grant was awarded that allowed us to offer the Dr. Dean Ornish Program for Reversing Heart Disease to our community. Our initial success in helping patients reverse their coronary artery disease matched the results published by Dr. Ornish. The treatment, however, was expensive, insurance coverage was very limited, and our recruitment efforts enrolled only about 60 patients a year.

As I was struggling to find a way to reach larger groups of people, I heard about CHIP, a community-based lifestyle medicine program being delivered by the founder, Dr. Hans Diehl, in Kalamazoo, Michigan (see *Cutting Cholesterol In Kalamazoo* on this page). We assembled a task force and spent two days observing the CHIP program, and what we saw, we liked. It seemed to be a good fit for our needs in Rockford.

This program could be offered “live” or as a video class for groups of 30 to 500 people and more. It included not only transformational information, but also clinical measures (health screens before and after) and skill training, such as cooking classes and grocery shopping tours and monthly alumni support meetings. Our group envisioned teaching lifestyle medicine to hundreds of

## ***Cutting Cholesterol In Kalamazoo***

Bypass Surgery, Angioplasty, Drugs. There's got to be a better way to prevent and treat heart disease, diabetes, and other diet-related diseases.

### ***Culturally-Promoted Diseases***

As a society, we do little to encourage people to stay healthy by eating a good diet and exercising. The typical effort—ineffective lessons in schools, occasional public-service messages on television, and random newspaper articles or TV shows—pales in comparison to the billions of dollars that makers of junk food, alcohol, and tobacco spend every year to push lifestyles that cause disease. Our mechanized, TV-saturated, information-age culture keeps people in the recliner, desk chair, or car, where their muscles and metabolism crumble.

### ***There Is Hope***

We needn't throw in the towel. Education can have a real impact, as at least three programs have demonstrated.

**CSPI.** The Center for Science in the Public Interest (CSPI) has sponsored campaigns to encourage entire communities to drink lower-fat milk. With hard-hitting paid radio and TV spots urging people to “switch to one percent or less,” the market share of low-fat or fat-free milk has as much as doubled in towns like Clarksburg and Wheeling, West Virginia. And the changes were still evident a year later.

**Pritikin/Ornish.** Once people develop severe heart disease, surgery has been the norm. But first Nathan Pritikin, and then Dean Ornish, proved that lentils can be as effective as surgery.

Residential treatment centers run by Ornish and others have shown that people with advanced coronary disease (and diabetes, obesity, or hypertension) are willing to make radical changes in diet and exercise that can eliminate the need for surgery and many drugs, even if it costs thousands of dollars a month.

**CHIP.** The California-based “lifestyle interventionist” Hans Diehl, has helped people avoid diet-related diseases by sponsoring special educational programs in cities like Rockford, IL; Kalamazoo, MI; and more than 120 cities in North America. Several hundred people at a time attend a four-week, 40-hour intensive education program on eating, cooking, shopping, and exercising. On average, men lose eight pounds and women lose six pounds. Participants with high blood pressure problems record average falls of 8 percent, and LDL (bad) cholesterol levels initially above 130 mg% drop, on the average, 19 percent in men and 11 percent in women.

### ***Conclusion***

Ornish, Diehl and CSPI have shown that if the right message is delivered, people will respond. We know how important it is to deal with bio-terrorism, but we also need to prod the government to make a major investment in diet and exercise campaigns.

*This editorial appeared in the Jan/Feb 2002 issue of Nutrition Action, the official publication of the Washington, DC-headquartered Center for Science in the Public Interest (CSPI). With over one million readers, this publication is one of the most read nutrition magazines in the world. Michael Jacobson, PhD, has been the founder and executive director of CSPI since its inception as a consumer protective organization for more than 30 years. For more information, visit [www.cspinet.org](http://www.cspinet.org).*

people throughout the community—at the worksite, in faith-based groups, in schools, and in medical institutions.

Over the next five years, the Rockford CHIP program handed graduation certificates to more than 4,000 participants. To support their new lifestyle choices, the CHIP alumni approached restaurants to provide healthy menu items that were “CHIP/Ornish approved.” As restaurant menus began to identify healthy menu items, people in the community developed heightened interest in becoming CHIP participants. Physicians were educated about lifestyle medicine as were civic leaders, schoolteachers, pastors, the Chamber of Commerce, and other community leaders.

The second principle of lifestyle medicine began to emerge: *People need to hear “information that is transformative” and this transformation is able to occur most effectively “in a group setting of strong social support.”*

### **Translating Principles Into Practice**

The SwedishAmerican Center for Complementary Medicine applied for research grants to study the impact of lifestyle change on health and disease in corporate sites, churches, and community groups. The results were dramatic. We began to “translate research into practice” by providing primary care physicians with the results from their patients who had participated in the CHIP/Ornish programs. As physicians observed the power of lifestyle change to prevent, arrest, and reverse disease, they became more inclined to refer patients to this transformative educational process.

The third principle became clearer to me: *Health promotion efforts are best realized in the context of an aligned community.* It indeed takes a “village” with infrastructures that support the new paradigm and that can lead to a cultural transformation with health as a focal point.

Rockford now has 33 restaurants providing CHIP/Ornish approved menus, a strong alumni organization providing continuing education in the area of lifestyle medicine, and exciting activities to support these new lifestyles. Corporations, churches, and schools are beginning to recognize the potential of lifestyle change to address the growing problem of obesity and related diseases in North America. We have shared our experience and our research results with neighboring communities. One city, Peoria, IL, developed a walking program called “The Moon Walk” where groups of citizens banded together to accumulate enough walking miles to take them to the moon and back. They have now challenged Rockford for a walking race to the moon and back while they take on the CHIP program to begin the healthy community transformation through lifestyle medicine in their town. We have begun to teach lifestyle medicine to the medical students at the University of Illinois College of Medicine at Rockford through classes in nutrition, complementary medicine, and contemporary issues in medicine.

### **The Denominator Of Care**

In medical school they taught us about the “numerator of care,” that is the right medication for a specific disease. But there is also a “denominator of care.” And that is the basic healthy lifestyle that can prevent, arrest, and often reverse many of our common lifestyle-related diseases.

Let me close with a case study from my practice to illustrate the power of lifestyle medicine, which involves this new “denominator of care.” A 70-year-old woman was referred for abnormal liver tests. She had an inflammatory bowel disease (colitis), high blood pressure, elevated blood cholesterol, and osteoporosis. She was 15 percent overweight, followed the common, rich Western diet, and was inactive. Her medications included Mevacor (for cholesterol reduction), Dyazide and Metoprolol (for blood pressure control), Potassium (to counteract the losses from Dyazide), Asacol and episodic Prednisone (to help with her colitis), and Pepcid (to counteract the GI upsets from Prednisone).

A liver biopsy showed that she had developed steatohepatitis, a fatty infiltration of the liver that can trigger an inflammatory reaction (hepatitis) that, if left untreated, could progress to liver cirrhosis and death. My patient was depressed and felt trapped in her multiple medical problems.

The medication she needed for her liver disease would cost an additional \$300 a month. Aside from explaining her clinical condition and how to use her new medication correctly, I was also eager for her to start the CHIP program to improve her overall health, and to lower her dependence on medication. But, she was “not interested.”

After listening carefully to her and inquiring, “What then is it that you want?” she said, “It’s really simple. My main wish is to visit my grandchildren. But I can’t go to see them because living on a fixed income, I don’t have the money, since I’m spending close to \$600/month on all these medications.” It was only when I suggested to her that attending and practicing the CHIP lifestyle might reduce her need for medication and thus help her save money that she became interested. But she didn’t want to spend money for the program, and so she asked me to just “tell” her what to do. I instructed her to eat more fruits, vegetables, whole grains

### **Encouraging News**

- Harvard Medical School’s annual conference on obesity last month was entitled “Obesity Medicine: Emergence of a New Discipline.”
- Last April, Duke University Medical Center announced it now will offer fourth year medical students a course in the causes and treatment of obesity.
- Last March, the American College of Lifestyle Medicine (ACLM) held its first annual meeting at Loma Linda University in Southern California. This new specialty—for clinicians who specialize in the use of lifestyle interventions in the treatment of disease—is enrolling, on average, one new member a day.
- At the federal level, the second national *Steps to a HealthierUS* was just concluded. Sponsored by the Department of Health and Human Services (HHS) under the direction of Secretary Tommy Thompson, it included a presentation of the results of the Rockford CHIP Randomized Clinical Trial (see *The Rockford Files*, pg. 26)



**“Applying our specific skills while supporting the body’s healthy potential through education, practice and precept—that’s the new lifestyle medicine paradigm!”**

and legumes, and to cut back on refined foods and animal products. I gave her a simple three-meal plan and asked her to walk 30 minutes a day and to use free weights for strength training three times a week. She followed my directions precisely.

While a costly liver medication had to be added to her treatment program, over the course of the next two years her blood pressure, cholesterol, and liver tests began to improve as did her colitis and GI upsets. By the end of three years, her liver tests were normal, and I was able to discontinue her medication. Her colitis no longer required Prednisone and much less Asacol. She was off three quarters of her blood pressure pills, she was no longer taking Mevacor, and her heartburn was almost a memory. As a result, she was now saving \$5,800 a year in out-of-pocket expense for medication. That gave her not only the money to travel to visit her grandchildren, but she had enough left over to buy gifts for family and friends.

This patient accepted the challenge of responsible self-care. She practiced her new lifestyle and because of it, she needed less medicine and had less disease. Her depression cleared and she had energy to restart her life (she went back to work as a grocery clerk three days a week and is volunteering as secretary at a social club she had not attended for years).

For me, the fourth and the most fundamental principle emerged: *Treat one, affect many*. As I began to practice holistic gastroenterology, I discovered that when I treated a patient with a gastrointestinal condition holistically, the patient’s other medical problems also began to improve. The high blood sugar levels in diabetics, the elevated cholesterol and blood pressure levels, overweight and heart disease—all of these improve simultaneously with the same simple changes in lifestyle. Treat one, affect many.

As specialists and as primary care physicians, we need to promote healthy lifestyle concepts as the “denominator of care,” and apply the specific clinical skills we learned in medical school and specialty training as the “numerator of care.” Applying our specific skills while supporting the body’s healthy potential through education, practice, and precept—that’s the new lifestyle medicine paradigm! It’s no longer wishful thinking. Together with

our patients, we as physicians can reverse many of the problems facing our healthcare system today.

Furthermore, longevity research is now providing powerful documentation that people who follow such a lifestyle can add between 10 to 20 years of high quality life and decrease the length and severity of the morbidity at the end of life (*Archives of Internal Medicine*, 2001; 161:1645-52).

### **A Personal Footnote**

In December of 2000, I completed training in Holistic Medicine through the Board Review course of the American Holistic Medical Association and successfully completed Board Certification as a Charter Member. I now enjoy practicing holistic gastroenterology serving as a champion and catalyst for the healthy community transformation process. And as Clinical Professor of Medicine at the University of Illinois College of Medicine-Rockford, I have been able to develop programs appropriate for medical students and family practice residents to expose them to complementary and alternative medicine in general, and to lifestyle medicine in particular. I am pleased to note a warm reception from medical students and young physicians who have been demanding more education in nutrition and weight management, previously absent from most medical school curricula. Because cost-cutting often leaves physicians with only 8 to 12 minutes per patient, it is important that lifestyle medicine programs develop in the community where physicians can offer support through patient referrals and through lectures and case studies with large groups of patients after office hours.

Physicians are used to referring patients after a heart attack or stroke to cardiac or stroke rehabilitation. New diabetics are regularly referred to diabetes school. These referral practices must be expanded to include the concept of lifestyle medicine, a concept that is prevention-oriented and goes beyond symptomatic treatment by attacking the causes of disease. Lifestyle medicine may be our best *treatment ally* to facilitate *disease reversal* and rehabilitation.★

### **ABOUT: Roger L. Greenlaw, MD**

Roger L. Greenlaw, MD, FACP/G, is founder and president of a 12-physician gastroenterology group that has served Rockford, IL for over 25 years. He serves on the faculty of the University of Illinois, College of Medicine at Rockford as Clinical Professor of Medicine, and is the Medical Director of the SwedishAmerican Center for Complementary Medicine.

The mission of the Center for Complementary Medicine is to promote a healthy community by empowering individuals to optimize health and to reverse disease through intelligent and responsible self-care within a holistic, supportive environment. Major programs include the Dr. Dean Ornish Program for Reversing Heart Disease and Dr. Hans Diehl’s Coronary Health Improvement Project (CHIP). At the Center, Dr. Greenlaw directs the research in lifestyle medicine, teaches continuing medical education classes for physicians, residents, and medical students, and offers public education classes emphasizing lifestyle medicine and complementary and alternative medicine for the prevention, arrest, and reversal of common debilitating diseases.

# The Rockford FILES

Six worksites in Rockford, Illinois prove  
that CHIP changes lives and betters business.

*By Hans Diehl DrHSc, MPH,, Roger L. Greenlaw, MD, and Peter J. Vedro, MAT*





Facing the brunt of society's healthcare problems, Corporate America is beginning to recognize that spending money to promote corporate wellness and healthful living among the workforce is good business. It promotes employee retention, lowers absenteeism and medical costs, and increases productivity. Moreover, according to several studies, well-constructed corporate health promotion programs can produce a return on investment ranging from 3:1 to 7:1 (meaning that between three and seven dollars are returned for every dollar invested) within one year.

In the previous article, we introduced the Rockford CHIP project and touched briefly on some of the results that project generated. It's no surprise that the cultural transformation that took place in Rockford was due, in large part, to the cooperation of several area businesses. Any widespread cultural health transformation must include the efforts of corporations—after all, work is where people spend the majority of their waking hours, where they eat and snack, and where they spend time with others in common work-related pursuits.

To provide some of the scientific description, interventions, and results of the Rockford CHIP program in affecting employees at the worksite, we will summarize here the full article published recently in the *Journal of Occupational and Environmental Medicine* which featured the Rockford CHIP project. (For those readers interested in obtaining the full transcript, the reference is: Aldana SG, Greenlaw R, Diehl HA, Englert, H and Jackson R. Impact of CHIP on Several Employee Populations. *JOEM* 2002; 44:831-9.).

### **CHIPing In...At Work**

In early 2000, CHIP personnel initiated discussions concerning an upcoming "CHIP At Work" study with the health promotion recruitment directors of many corporations in the Rockford area. During the previous 18 months, more than 1,000 Rockford residents had partic-

ipated in three, four-week CHIP live-lecture courses. Many of these CHIP graduates were instrumental in introducing the CHIP program to their respective employers. In addition, several company managers and administrators were among these graduates. Because of this prior exposure, many companies were somewhat familiar with the program or had employees whose health had been influenced by the program.

### **Getting To Work**

By October 2000, six companies had agreed to participate in the study, including Ingersoll, Pfizer/Adams, Rockford Products, the SwedishAmerican Center for Complementary Medicine, the Woodward Corporation, and an international automobile manufacturer. The employees within these companies received information about the CHIP video program and were encouraged to participate by contacting their on-site health promotion administrators. Each company was able to recruit as many participants as it deemed feasible. The cost of providing the video program was shared between the employer and the employee. At most sites, each party initially paid 50 percent of the cost. Upon graduation, most companies reimbursed participating employees for a portion of their cost. In addition, some companies offered their participants full reimbursement on the program cost at the end of one year, provided they continued to adhere to the program.

A total of 453 employees chose to participate. They were evenly divided between blue- and white-collar job descriptions. Their average age was 52.1 ( $\pm 9.2$ ) years and 62 percent were female. At baseline, each participant completed the *HeartScreen*, a self-reported questionnaire that gathered information on demographics, lifestyle habits, medication use, and a short medical history. On this same form, a registered nurse entered all biometric data including height, weight, blood pressure, blood lipids, and fasting blood glucose.

After completion of the baseline *HeartScreen*, participants began eight weeks of educational lectures delivered via video and augmented by CHIP facilitators. At the end of the eight-week intervention, the second *HeartScreen*—

identical to the one used at baseline—was administered.

### **The Intervention**

The intervention used for this study was the facilitator-based video version of the CHIP program. Participants met for eight weeks—twice each week for two hours—during which time they received instruction via 15 CHIP videotapes. A trained facilitator was present at each of the intervention sites and was responsible for answering questions regarding the video presentations, workbook assignments, and the program itself.

Along with the educational video program, participants were encouraged to follow preset dietary and exercise goals. The dietary goal involved adopting the *CHIP Optimal Diet* (see pg. 19) with an emphasis on more whole foods such as grains, legumes, fruits and vegetables.

At the same time, CHIP program participants were encouraged to build up toward walking or exercising at least 30 minutes per day. Participants kept an exercise log to record the numbers of miles they walked each day. The program facilitators checked these exercise logs during each class.

### **Rock Solid Results**

Because the initial cost of the program was shared between the employer and the employee, rates of recidivism were very low—only 11 out of 453 failed to attend the required 80 percent of all group meetings. Upon analysis, all worksites individually and collectively demonstrated very significant and meaningful reductions in body weight, blood pressure, cholesterol, LDL, triglycerides, and fasting blood glucose. Men demonstrated greater improvement than women, and those with higher baseline risks experienced the greatest reductions in risk.

Research has shown that for every 1 percent drop in cholesterol or for every 1 mm Hg drop in elevated blood pressure, there is a subsequent two to three percent reduction in coronary risk. CHIP participants with dangerous diastolic blood pressures had an average decrease of 14 mm Hg, which translates to a 28 to 42 percent reduction in coronary risk. Those with high cholesterol had an average decrease of 47 mg% or 18

*Left: The Floral Clock located in Sinnissippi Gardens in Rockford, IL. Sinnissippi Gardens offers Rockford residents a place to take a walk, spend time with their families, and enjoy the heart of Rockford.*



**“Taken together,  
these two reductions  
alone translate into a  
possible coronary  
risk reduction of 64  
to 96 percent!  
Many of these risk  
reductions are  
the largest ever  
reported from a  
worksite interven-  
tion in the scientific  
literature.”**

percent, which translates into a 36 to 54 percent coronary risk reduction. Taken together, these two reductions alone translate into a possible coronary risk reduction of 64 to 96 percent!

Many of these risk reductions are the largest ever reported from a worksite intervention in the scientific literature. Even though these findings were remarkably consistent across sites, causality cannot be demonstrated without evaluating the program in a randomized controlled design. Lack of a randomized controlled group, however, should not diminish the fact that 442 employees who participated in the program significantly reduced their health risks.

### ***The Human Side Of The Rockford Project***

The CHIP video program conducted at worksites appears to be an effective method of empowering employees with the cognitive content and behavioral skills

needed to make healthy lifestyle changes, which in turn, significantly reduces their health risks.

Scientific reports rarely, however, convey the full story, especially when it comes to the human side of the equation. The following case study focusing on one of the participating companies—the Rockford Products Corporation—sheds some light on the profound impact the Rockford CHIP project had on individuals and organizations alike.

### ***In Their Own Words: The Rockford Products CHIP Program***

*Richard Mowris,  
VP of Administration  
& Human Resources,  
Rockford Products Corporation*

“We’re an ESOP (Employee Stock Ownership Plan) where everyone who works for the company is also an owner. As such, we treat employees like family, and that’s what makes us truly successful. But it also gives us much concern—we worry about employee health and well-being, and we are constantly looking for better ways to improve it. After attending an eight-hour CHIP executive FastTrack program, our chairman, Ray Wood, and his COO, Dave Peterson, felt that they had found a program that represented a great opportunity for our owners and associates. We invited Dr. Hans Diehl and his CHIP team to visit, and decided to give the CHIP video program a chance here onsite at Rockford Products.

My wife and I, as well as our Director of Training, Jerry Norquist and his wife, enrolled in the first CHIP program along with many of our associates. All of us were pleased with the program. It’s well structured, evidence based, entertaining, and very motivational. People do change their habits once they understand the “whys” and “how tos,” and their clinical improvements spur them on to follow through on their new lifestyle.

As a result, we have offered the program now a total of four times. And the results are pretty much the same. Of course, some results stand out more than others. Our

engineering manager went through the program with his wife. They got so excited about the impact the program had on their health that they invited his father—a former Rockford Products employee—and mother to attend the next CHIP program. Together, they represented more than 100 years of seniority at Rockford Products, which uniquely reinforced our concept of extended family. Since then, we have encouraged all of our retirees to take advantage of this program as well.

Of course not everyone is ready to take part in the program. For example, our management approached two of our associates working in similar jobs. We felt both could benefit. One signed up with his daughter, and they completed the program. The other said he wasn’t interested and turned his back. The former sang the praises of the program, embraced it, and has reaped the benefits. The latter soon retired and shortly thereafter died from a massive heart attack. It was tough for us—losing family is always tough. We don’t know if the CHIP concepts would have given him the retirement years he deserved. But we know that it would not have hurt him.

Our hope and desire is that many of our owners will take advantage of this proven program so they can live happier, healthier, and longer lives. CHIP has been a great experience for Rockford Products. We’re enjoying it!”

*Jerry Norquist,  
Director of Training & Development,  
Rockford Products Corporation*

“From time to time I get asked how difficult it is to implement the CHIP program. I tell people, ‘It’s easy, very easy. You have 60 to 75 action-packed minutes on video, and then you have another 45 to 60 minutes for personal interaction among the participants and the facilitator. But the focus is on Dr. Diehl. His lectures are packed with scientific information, compelling data, and human-interest stories—everyone’s attention is just riveted on him throughout the 16 sessions. And his presentations stimulate thought and lead to excellent discussions.’

Others ask me, ‘How do you measure

**“We have done a pretty good job in trying to put the responsibility back on the individual. Now we have to find consistent and effective ways to keep them motivated to do this—to take responsibility in an intelligent way. We are going to do it with a little more push than some might like, but, maybe that’s what it takes.”**

the effectiveness of the CHIP program? Actually, the clinical testing before and after the program provides some very clear answers. It allows us to track weights and blood pressures, blood sugars and cholesterol levels, triglycerides, heart rates, and smoking behaviors, and it allows us to see the changes in medication, attitude, and behavior. These changes, over an eight-week span, are usually quite impressive.

It’s gratifying for me as the CHIP facilitator to see our associates buy into the CHIP concepts. I see their satisfaction over having been able to make some changes for the better. They report their two-mile walks with joy. They now make wiser decisions in their food selection. And they come to us and say, ‘Thanks for giving me the understanding, concepts, skills, and strength to change—and for giving me the hope that I can make a difference in my own life, in my family relationships, and in my company.’ They have learned a life-changing lesson—health does not so much

depend on the doctor. Health is an inside job. We have to do our part. They have enlarged their sense of ownership. They not only own the company, but now they also have a big say over their health—and perhaps their lifespan.”

*Ray Wood,  
Chairman, President and CEO,  
Rockford Products Corporation*

“I was sitting through one of the CHIP Executive FastTrack sessions and I turned to my COO, Dave Peterson, and said, ‘You know, I think we need to do something different at work.’ You see, our 850 people aren’t just shareholders, they’re my co-workers. They’re my colleagues. And we’re losing them—19 heart attacks and three of them have died on our shop floor.

In our partnership with the SwedishAmerican Health System, we have regular health screenings of our shareholders. We know their values. We know who is at the greatest risk for heart disease, diabetes, or stroke. At last, we can do something to help them. CHIP is giving us the educational tools we need. Now that I had finally gotten the message, I decided we had to take these concepts back to our shareholders, and I knew that everyone would receive the message with open arms!

What a let-down! The CHIP program wasn’t accepted with the enthusiasm I had hoped for. But a moment of clarity came when only three weeks later, a 43-year-old man dropped dead as he was getting ready to go home at the end of his shift. It caught the attention of a lot of people in our plant. A lot of them came to us and said, ‘I really want to change my lifestyle.’ We had approached others by putting our arms around their shoulders and saying, ‘We really like you a lot. Look, I don’t like to tell people how to live their lives—because I don’t like others telling me—but we are concerned about you. You need to do something. You already had a heart attack, and your weight is back up. Join CHIP.’

It gives me great pleasure to say that one of these men was recognized at a recent CHIP graduation as having had the greatest cholesterol drop in his group. You should have seen his joy and how proud he was of himself!

To push healthier lifestyles, I think, is an

obligation I have, because they are my friends! Oh, we may save some money in the process but even if it’s a wash, that’s OK.

We have done a pretty good job in trying to put the responsibility back on the individual. Now we have to find consistent and effective ways to keep them motivated to do this—to take responsibility in an intelligent way. We are going to do it with a little more push than some might like, but, maybe that’s what it takes.”

*Dave Jackson,  
CHIP Participant*

About a year ago, I had high blood pressure and chest pains. I didn’t tell my wife about it because I didn’t want to scare her. I kept it to myself for as long as I could, but finally I had to tell her. We went to our family doctor, and he told me I had to see a cardiologist. I saw the cardiologist and went through several evaluations and he told me I needed an angiogram. I went in and had one. And while they were doing that, they found three plugged coronaries, which they unplugged with three angioplasties. When the surgery was finished, they told me about CHIP being offered through the hospital, and recommended that I should sign up. I didn’t. I thought I could do it myself. I went home and started eating everything that was supposed to be healthy—chicken, fish, and turkey—everything that was supposed to be good for me. Five months down the road, I started having chest pains again.

It was about that time that Rockford Products started to offer the CHIP Program using the videos. I took the information home to my wife and she said, ‘We’re going to do this together.’ Well, I’ve worked at Rockford Products for 38 years, ever since I was 18, and they’ve been very good to me. But the best thing they have done for my wife and me was bring this program into the company. My chest pains are gone. Boxes I couldn’t lift off the floor without angina pain, I can now lift without pain. My doctor had to discontinue my blood pressure medication because my blood pressure improved so much, it would have been too low with the pills. My wife says she got a new husband, and we can’t thank Rockford Products enough for making the CHIP program available to us. I tell all my friends, “Take this course!” ★

**A**s suggested by the CHIP daVinci Model for community health transformation, faith communities are also an appropriate and essential domain for CHIP activity. Faith communities represent committed, active, and involved

individuals seeking ways to make themselves, their families, and their communities better for today as well as for tomorrow. Members of faith communities are also part of the “movers and shakers” of the community at large, and many of them tend to be as actively involved in other community endeavors (such as in business, school, government, and recreation)—as they are in their faith.

Although the primary focus of a faith community CHIP intervention may appear to be solely for the spiritual health and the well-being of the congregation, CHIP also empowers people through their physical abilities to do the good that their spirits require of them. Indeed, participants must be up to the physical challenge as well as the spiritual one.





# Have Faith In CHIP

**Two faith communities use CHIP to improve the physical, mental, and spiritual health of their congregations.**

*By Mark Hunter, Harold Burden, MPH and Dena Guthrie, RN*

This article focuses on two faith-communities. Each one has implemented CHIP for its members, as well as invited guests from the community. The first faith community, Pilgrim Baptist Church, is an African-American congregation, located in central Rockford. The intervention at Pilgrim Baptist Church is significant for several reasons. First, African-Americans are at a significantly higher risk for debilitating disease. Second, consider that the church is oftentimes the center for community activity and involvement in many African-American communities. Mark Hunter, Winnebago County Black Male Health Coordinator and Certified CHIP facilitator, will set the stage for the description of Pilgrim Baptist by sharing some information on “The African-American Male Health Crisis.” Following this, an article reprinted from the *Rockford Register Star*, will detail further statistics and uncover the intriguing story of Pilgrim Baptist Church.

The second faith-community highlighted in this article is the Adventist CHIP Association (ACA), which represents a model for what other faith communities can do with CHIP. The principal full-time volunteers in this expanding ministry over the last four years have been Harold Burden, MPH (former Health Educator at Portland Adventist Medical Center in Oregon), and Dena Guthrie, RN, ANP (Director of the CHIP program in Groveland, CA for many years). Their story will demonstrate how CHIP fits into the Adventist community and helps members of this faith community live healthier, happier lives.

Let's first look at “The African-American Male Health Crisis” to better understand how CHIP is making an impact at our first faith community, Pilgrim Baptist Church.

### **The African-American Male Health Crisis And Pilgrim Baptist Church**

*By Mark Hunter, Coordinator of Black Male Health,  
Winnebago County Dept. of Public Health*

Advances in medicine have enhanced many aspects of the lives of Americans. While great improvements have been achieved, sadly, the health of African-Americans has not kept equal pace. The time is ripe to make changes—changes that are of critical importance. Current statistics tell a frightening story. Consider the following.

#### **Black Male Health Statistics**

- Black males are in the highest at-risk group for heart disease, stroke, cancer and diabetes. Their heart disease and cancer rates are 80 and 50 percent higher, respectively, than for white males.
- Nationally, black males and females have life expectancies of 66 and 74 years respectively. This compares with 74 and 80 years for white males and females.
- In the Rockford, IL area, black males die at an average age of 59.6 years of age. The average age of death for third world countries is 60 years of age.

Several factors contribute to these alarming statistics, including a history of distrust, racial differences in medical treatment, and access and insurance issues. Let's look briefly at each of these factors.

**A History of Distrust.** Often, an unspoken distrust of physi-

cians and the overall medical system exists among African-Americans. Although unthinkable today, the Tuskegee Study of 1932 lingers on in the memory of many. In this study, African-American men were left untreated with syphilis to study the disease at different stages.

**Racial Differences In Medical Treatment.** Research reported in major medical journals has documented that significant differences can exist in the treatment modalities between African-Americans and Caucasian patients. For instance, in the treatment of acute heart disease, costly yet effective thrombolytic agents (clot busters), angioplasties, and bypass surgeries are less frequently administered to black patients. The differential rates were more prominently explained by ethnicity than by income issues.

**Access And Insurance Issues.** Many communities have a disproportionate distribution of quality healthcare services for people to access. Former Surgeon General David Satcher, MD, reported that 40 percent of African-Americans do not have a primary healthcare provider.

### **Building Trust**

While many factors contribute to this disparity, healthcare providers can do much to help reverse these trends. Here are a few ideas.

- **Give good eye contact.** Eye contact is often viewed as an initiative to participate in problem solving, which is particularly important to black men.
- **Encourage good health as a good “provider” quality.** Taking care of their health is seen as the best insurance policy men can give to their families.
- **Encourage African-Americans to secure a “medical home.”** Finding a primary care physician they can trust for the entire family can provide security, lower emergency room costs, and more consistent preventive care, encouragement, and counseling.
- **Be aware of your own bias and be honest with yourself.** Recognize opinions you may have about people of different races, backgrounds, and cultures. Respect people as unique individuals with unique life circumstances.
- **Help your community end health disparities.** Support efforts to reduce health disparities. Never underestimate the power of a physician's genuine interest and involvement in creating a healthier community.

Communities across the nation are joining forces to end disparities and to enhance prevention education and skill training which can significantly reduce the incidence of common debilitating diseases in the African-American community. Following is an article reprinted with permission from the *Rockford Register Star*. The article describes how the CHIP program has made a difference in the African-American congregation at Pilgrim Baptist Church.

### **Pilgrim Baptist Church Improves Health**

Results are in for 33 people who participated in the Coronary Health Improvement Project (CHIP) from May to July, 2002 at Pilgrim Baptist Church.

Participants lost a total of 168 pounds, dropped their chole-

terol levels, and reduced their triglycerides and low density lipoproteins (LDL) during an eight-week period.

"I feel better, my clothes fit better, and I am even getting into things I couldn't fit into after I had my second child last year," said Shurice Hunter, an administrative assistant who coordinated the program for Pilgrim Baptist Church and lost 16 pounds in eight weeks "while eating more than ever, but this time of the right foods."

The CHIP program is available to participants from a cross-section of income and educational backgrounds. It encourages men and women to adopt lifestyle changes to become healthier.

Anyone can coordinate a CHIP program for their business, church, or other group after they have been certified by the Lifestyle Medicine Institute. The focus is on reducing risk factors associated with heart disease, diabetes, high blood pressure, and certain adult cancers through lifestyle changes, particularly in the area of diet, exercise, and smoking.

The top three weight losers during the eight-week intervention program lost 17, 16 and 15 pounds; they reduced their cholesterol by 74, 48, and 47 points, and dropped their LDL cholesterol levels by 69, 38, and 27 points, while the triglycerides came down by 74, 69, and 37 points.

The course, offered over an eight-week program with meetings twice a week for two hours, includes 32 hours of video instruction, pre- and post-medical analysis (cholesterol levels, blood sugar, blood pressure, heart rate, and ideal weight are determined) and a complete lifestyle evaluation.

Participants receive the CHIP manual, text, and workbooks, and are taught how to shop for healthy groceries, learn to read and understand package labels, and cook food in healthier ways. "It's a lifestyle change for me and it's something my husband and I, and our family, are going to do for the rest of our lives just because we feel so much better," Hunter said. For more information on the Pilgrim Baptist Church CHIP program or to contact Mark Hunter, visit [www.wchd.org](http://www.wchd.org).

Pilgrim Baptist Church is a powerful example of how CHIP can be incorporated into a single faith community with powerful results. The Adventist Chip Association (ACA) is harnessing the power of CHIP by bringing more than 160 CHIP-certified programs to Adventist churches scattered all across North America. Following is their story as told by Harold Burden, MPH and Dena Guthrie, RN, co-directors of the Adventist CHIP Association.

### **The Adventist CHIP Advantage**

**By Harold Burden, MPH and Dena Guthrie, RN,  
Co-Directors, Adventist CHIP Association**

Over the last four decades, the National Institutes of Health have committed more than 20 million dollars to the study of the Adventist lifestyle to discover its impact on longevity, morbidity, and mortality. Over 300 articles published in peer-review journals have come from this study, and a new phase of the research promises an increased understanding of lifestyle medicine. Given our history, it comes as no surprise that Adventists are excited about CHIP—a program that powerfully promotes the very essence of the preferred Adventist lifestyle!

The Adventist CHIP Association, a non-profit organization, was formed in December of 2000 to inspire, train, and support Seventh-day Adventist churches to conduct CHIP programs in their communities. From only three active programs at that time, in less than four years the Association now supports more than 160 CHIP-certified programs in Adventist churches scattered across North America. New programs are approved each month. These programs have forever changed the health and well-being of thousands of grateful participants. Regular CHIP chapter alumni meetings continue to nurture the commitment to be "healthy by choice, not by chance." An eight-member executive committee, regional coordinators, and a host of local volunteers support the ever-expanding Adventist CHIP ministry. The entire Association is volunteer-based and mission-driven, from its headquarters to its local chapters.

In cooperation with Dr. Hans Diehl, the Association has developed program materials, leadership training workshops, and an annual CHIP Summit to ensure quality, uniformity, scientific updates, and a broad network of communication among Chapter leaders. Summary clinical data from the before and after laboratory testing is collected from each program for evaluation. A web site increasingly enables enhanced communications among current programs and the sharing of health information with the general public.

### **A Passion For Ministry And Health**

Because of its passion for health ministry, the Seventh-day Adventist Church has indeed proven to be fertile soil for the rapid expansion of CHIP—a powerful, life-changing program. From their earliest historical roots, Seventh-day Adventists have been committed to making people whole in body, mind, and spirit. As early as 1863, the founders of the church focused on the prevention and treatment of disease, emphasizing a plant-based diet, pure water, fresh air, brisk exercise, sunshine, and temperance. Battle Creek Sanitarium and John Harvey Kellogg, MD, were at the fountainhead of Adventist health development and rose to worldwide recognition. Presidents and princes in search of better health visited the Sanitarium. From those early days, Adventist healthcare has mushroomed into more than 600 healthcare facilities worldwide.

Long before current medical science had discovered the adverse effects of tobacco, for example, Seventh-day Adventists were urging people to stop smoking. Before research had found that restricting caloric intake was the primary key to longevity, Adventists were advised to "eat breakfast like a king, lunch like a prince, and supper like a pauper."

It is easy to see how CHIP and the Seventh-day Adventist Church have developed such a strong and unique bond. As CHIP co-directors we look forward to a long and healthy future with CHIP, bringing improved health in mind, body, and spirit to Seventh-day Adventists across the nation.

For more information on the Adventist CHIP Association and their upcoming summit to be held November 10-14, 2004 in Vancouver, BC, call 866-732-2447 or visit [www.adventistchip.org](http://www.adventistchip.org).★





# Food For Thought

School nutrition programs help combat childhood obesity, enhance the educational environment, and teach food skills for life to our nation's students.

By Antonia Demas, PhD, and Barbara Stitt, PhD

As a result of the growing concern about the increase in childhood obesity and its consequences, a coalition of adults—including medical practitioners, parents, teachers, and governmental and school officials—are rethinking what our schools should be providing both in the classroom as curriculum, and in the cafeteria as food service.

Historically, the Federal government, through the National School Lunch Program (NSLP), has provided low-cost “commodity” foods to schools enrolled in the NSLP. Recently, many have questioned both the nutritional and health value of the commodity foods chosen under the program. They have questioned the reliance on highly processed foods and animal protein which are usually high in fats, cholesterol, sugar and salt, and low in fiber. Additionally, many schools—as a result of cost-cutting—have “sub-contracted” school lunch programs. Indeed, if you go to almost any school during lunch break, you are apt to think you are at a typical fast-food pavilion at the mall. In many ways, the school lunchroom is now indistinguishable from the fast-food outlets down the street. Originally, this was thought to be not only more cost-effective, but also more in alignment with children’s “choice.” However, more and more questions are being raised as to whether it is a good policy to invite the very same forces we have concerns with—the fast-food chains—into the school cafeteria as food-service providers. Regrettably, this abdication of adult responsibility in establishing the best choices—whether as a result of budget or tastes—has added to the current condition.

In this article, two programs are highlighted—the *Food is Elementary* program, led by Founder and Executive Director of The Food Studies Institute, Antonia Demas, PhD, and the *Peak Performance* program, led by Barbara Stitt, PhD, and her husband Paul. Both programs have made significant contributions to teaching children from elementary through high school about good food choices, both in the classroom and the cafeteria.

## The “Food Is Elementary” Program

By Antonia Demas, PhD

President, Food Studies Institute

Why a food-based curriculum? Children need to learn healthy eating patterns at an early age so that they can protect their health through diet as they grow older. Poor eating habits can:

- lead to overweight, diabetes, hypertension, and narrowed arteries (now recognized as pediatric diseases);
- interfere with optimal learning (lower-income children are especially vulnerable in this area);
- affect social behavior.

On the other hand, healthy, delicious whole foods, served in the school meal program, can help avoid these diseases, optimize learning and social behaviors, and become a catalyst for dietary changes at home. The *Food is Elementary* program actually educates the parents through their children. Used now for more than 10 years in more than 150 US school systems, and highlighted in educational and medical journals (*American Journal of Cardiology*), this curriculum has demonstrated that children and their families can be motivated to choose healthier foods and enjoy them.

## Program Goals

The *Food is Elementary* program was piloted in elementary schools with the following goals.

- To increase interdisciplinary learning so that students learn to make connections between science, math, and the social sciences
- To increase understanding of the relationship between diet and health
- To improve students’ problem-solving, critical thinking, and decision-making abilities
- To foster cooperative learning/peer education
- To develop cross-cultural knowledge, acceptance, and understanding
- To increase childrens’ food and nutrition awareness through acceptance of diverse, healthful, foods
- To develop an understanding of biology and the life cycle of plants via a school garden
- To encourage healthy menu changes in the school lunch program
- To encourage childrens’ creativity and to develop social skills and raise self-esteem in children.

## How The Program Works

Experiential learning through engaging the senses requires children to cook cooperatively with their peers. It is well known that children first learn about the world through their senses. Through cooking, all the senses are utilized creatively thus taking advantage of a natural receptivity in children. At the core of the curriculum is the use of food themes as they relate to culture, the arts, and academic disciplines. For example, a unit on a particular culture involves classes learning about the foods cooked by that culture, agrarian history, geography, folklore and literature, music, crafts, social structures, and customs. A typical class can interrelate studies of the natural sciences by exploring changes in matter through cooking and the use of the scientific method by observing the properties of ingredients and their combinations. Mathematical concepts can be reinforced through measuring, weighing, estimating, and otherwise quantifying foods. The *Food is Elementary* curriculum provides a proven means for children to accept a more healthful and diverse diet through experiential learning, which can be successfully integrated with the school lunch program (see *Food is Elementary Curriculum Highlights*, pg. 36 for a detailed overview of what the program teaches children).

## Getting Results: The Baypoint Project

Recently, the *Food is Elementary* program was utilized at The Baypoint Residential School in Miami, a school that admits court-referred boys sent there for criminal behavior. The program exposed students and staff to the effects of nutrition on health and social behavior. Then, students volunteered to adopt a strict, whole-foods, plant-based diet for three weeks. They cooked and ate all their own meals, kept daily journals, and drank eight glasses of water a day. With their behavior closely monitored, cheating was not possible. Results were dramatic—all students showed

improvements in cholesterol, behavior, and academic performance. One of the students, Luis Pinto, was invited to give a guest lecture at Cornell University to talk about his life before he understood the effect of nutrition on health and behavior. Because of his success with the nutrition project, he was able to obtain a full scholarship at the exclusive Johnson and Wales College, known for its Culinary Arts curriculum.

### **More Results: The Vermont FEED Project**

The *Food is Elementary* program was recently paired with the *Vermont FEED* (Food Education Every Day) Project, a program designed to bring local farm products to the school lunch program and to educate students about locally-produced foods. The *Food is Elementary* program was introduced to develop additional curricular units. Interim results are as follows.

- Nutritional scores before and after the curriculum addition improved by 35 percent.
- Children changed favorite foods from unhealthy to healthy ones and added 64 nutritious foods to their diets.
- Out of 120 parents, 81 percent reported positive changes in their childrens' eating behavior. All parents but one insisted that nutrition education be maintained in the teaching curriculum.

- Teachers and principals are much more aware of the childrens' lack of nutritional knowledge and the effects on health, intellectual growth, and social development. They want nutrition education to occur.

We are pleased with the results of these programs and will continue to strive to bring healthy foods and healthy attitudes to schools around the nation by promoting proper nutrition information and nutrition education to the nation's youth. For more information on the *Food is Elementary* program or to contact Dr. Demas, visit [www.foodstudies.org](http://www.foodstudies.org).

### **The Peak Performance Program**

**By Barbara Stitt, PhD**

**Co-Owner and President, Natural Ovens Bakery**

The *Peak Performance* program is also making a profound impact on the health and well-being of students. In the following segment, we'll highlight this program and reveal the positive influence it has had on the Appleton Alternative School located in Appleton, WI.

To successfully address the epidemic of childhood obesity and its consequences, we have to start at the beginning.

What are the forces acting on children to drive them towards unhealthy eating habits and where are the strategic points that

### **Food Is Elementary Curriculum Highlights**

The following topics are included in the *Food is Elementary* program curriculum

- ▲ **The Food Pyramid.** Why do the foods at the base of the pyramid form the foundation of a healthy diet? Students are given blank outlines of the pyramid and stickers of various foods to fill in the spaces. This reinforces concepts about food categories.
- ▲ **Dietary Fat.** How are rich diets and killer diseases so closely related? Students learn how fat sticks to the inside of their blood vessels and narrows them. They then can taste and/or touch five different milk products ranging from skim milk up to heavy cream to get that distinguishing "fat" feel.
- ▲ **Food Comparisons, Labels, and Shopping.** By comparing home made with prepared soups, or whole foods (potatoes) with processed foods (potato chips), students learn how to be wise shoppers and get the best nutrition for their money. Older children learn to read labels and interpret ads. As a homework assignment, students read at least one nutritional label with their parents and report back to the class.
- ▲ **Exercise.** Multicultural music is played so the children can dance. Students discuss the benefits of regular exercise in helping to prevent the build-up of "fatty rust" on the inside of their arteries. They also talk about the way exercise makes them feel good by increasing the flow of oxygen throughout their bodies.
- ▲ **Vitamins, Food Preparation, Hygiene and Safety.** Students learn the names of the basic antioxidant vitamins, their best food sources, and the parts of the body which benefit from each. They also learn why clean hands and sanitary equipment are essential to healthy food preparation and how to use kitchen equipment and utensils safely.
- ▲ **Whole Grains.** What's the difference between whole grains and refined grains? Students discover many whole grains not commonly eaten in the United States. They sample a variety of whole grain breads, identify the tastes of the different breads, and choose their favorites.
- ▲ **Fruits.** Students will sample exotic and everyday fruits, rank them according to taste, preference, or other characteristics, and choose their favorites.
- ▲ **Veggies.** Students will identify a variety of vegetables, some coming from roots, bulbs, and stems, and others from the leaves of plants. Children will smell, touch, observe, and taste many different kinds of fresh vegetables.
- ▲ **Legumes.** What are their nutritional values? The children prepare two bean dips—hummus and black bean—as well as a simple salsa. Then they sample them with baked corn chips and whole grain pita bread.
- ▲ **Food as Art.** Students tune in to the aesthetic aspects of food and the value of preparing a beautiful as well as nutritious meal. Students prepare actual meals with foods selected for their color, texture, and nutritional value.



these forces can be intercepted and altered? Home is the most obvious place, but equal to if not more important, is school. After all, it is at school that children learn. But what are they learning?

The answer to that question is not all that comforting. In addition to all the other problems with our schools today—teacher shortages, academic accountability, depleted funding, etc.—there is a problem in the cafeteria! Today's children are exposed to "Pizza Day" or "McDonald's Day" or "Taco Bell Day" at their schools. These fast-food icons have increased their presence—not only serving dinner to many families, they're also serving lunch in the vast amount of public schools throughout the country.

While school districts across the nation are looking for ways to improve their schools, they often overlook an important influence on learning—good nutrition. The connection between nutrition, disease, and learning is well established among scientists. Some of them, such as Barbara and Paul Stitt, are getting involved with a growing grassroots movement to "reclaim" the school cafeteria!

Barbara Stitt, PhD, author of *Nutrition and Behavior*, along with her husband, Paul, recently brought the concepts of their *Peak Performance* program to the Appleton Alternative School in Appleton Wisconsin. In the following segment, Dr. Stitt gives some background on the *Peak Performance* program and explains the Appleton School Healthy Foods Project in detail.

### **The Roots Of Peak Performance**

In 1963, while working as a Probation Officer in Ohio, I saw thousands of people referred by the court, and it consistently proved out that serious, multiple symptoms of fluctuating blood sugar was very often the basic root problem. When the diet of high sugar, white flour, caffeine, and highly-processed "junk" food was replaced with nutritious fresh fruits, vegetables, legumes, whole grains and foods-as-grown, behavior was dramatically improved and the re-arrest rate plummeted. We followed these people for 12 years and 89 percent of them did not get back in trouble.

In 1982, Paul Stitt, biochemist and founder of Natural Ovens Bakery in Manitowoc, Wisconsin, and I married. We became not only partners in life, but also partners in providing delicious, fresh, whole grain bread products. Some 10 years later, we began to work with schools, especially with "special ed" classes (classes consisting of children with behavioral problems). We used the same framework I had used in the prison system, providing our whole grain bread products along with fresh fruits and vegetables to the students. Within a week to 10 days, the teachers reported that they were actually able to teach because the behavior problems of the students dramatically improved.

### **Peak Performance Expands**

Shortly thereafter, we began to expand to other classrooms in Wisconsin, Illinois, and Minnesota, training the teachers in how to teach nutrition to the children. We provided the children with highly nutritious fresh bagels and a high Omega-3 Energy Mix (a blended, sugar-free pineapple juice) for breakfast and again as a snack in the afternoon. For several years our *Peak Performance* program involved about 1,500 students each year.

In an effort to let the students experience for themselves how food affects the way they feel, perform, and behave, we would allow them

to have a "junk food day" after two months of receiving the nutritious foods. The teachers were stunned to watch the behavior and ability of their students rapidly deteriorate. Within two or three hours, the noise level increased dramatically. Some children became hyper. In one instance, a school police officer had to bodily remove two older students who were physically threatening the teacher and fellow students. Other students became tired and sleepy, and a very high percentage developed headaches and stomachaches. Academic performance also suffered. Hand writing on "junk food day" suffered, and math, spelling, memory, and reading skills dropped noticeably. Further, heart rates in second and fourth grade students almost doubled. Over the past 10 years, these studies have been duplicated, and year after year, teachers report the same results.

### **Peak Performance Meets Appleton Alternative School**

As a result of the dramatic impact of the *Peak Performance* program, we were invited in 1997 to underwrite a full nutritious breakfast, lunch, and snack program for the entire Appleton Alternative School of over 100 students. We agreed to put in a new kitchen, provide cooks who understood how to purchase, prepare, and serve whole fresh foods, and we also agreed to underwrite the program for a full five years. Since the beginning of the *Peak Performance* program, principal LuAnn Coenen has been able to record these numbers on her school behavior reports: 0 dropouts, 0 expulsions, 0 weapons, 0 drugs on campus, and 0 suicides. Again, Coenen has reported these numbers every year since the inception of the *Peak Performance* program. The staff had expected the program to "settle the kids down." However, everyone has been surprised at how much the change in foods has also improved the students' academic ability.

### **Expanding Program**

The school board and superintendent were so impressed with the positive impact of this fresh foods program, that effective June 9, 2003 they voted out all junk food and candy fundraisers in all 25 schools in Appleton. According to the Superintendent of the Appleton School District, "Since the food improvement program began, student attendance has soared, and last year only 16 expulsions out of 4,500 high school students (.3 percent) were reported." This stunning improvement happened even though the food program district-wide is not yet nearly as nutritiously complete as the program in the Alternative School.

The entire community of Appleton is excited about the improvements within their school system. Even with last year's severe cuts in the school budget, not one single teacher or parent has suggested they go back to making the extra money from the fast foods, vending machines, and candy fundraisers. One cost offsets another. They no longer require high security, and the teachers now teach instead of spending so much time on disciplinary issues. Moreover, the students are receiving the respect they deserve by being provided fresh, nutritious food, water, and good exercise, allowing that they can perform to their best ability. For more information on the *Peak Performance* program or to contact Dr. Stitt, visit [www.naturalovens.com](http://www.naturalovens.com), or call 800-558-3535. ★







# CHIP-Shape

*CHIP participants take to the high seas, enjoying a healthy way to “cruise and lose.”*

***By Laurel Lund and Carla Davis***



Recently, CHIP participants had the opportunity to take a cruise aboard Carnival Cruise Lines' *Paradise* Cruise Ship. The cruise proved that healthy living has a place in all facets of life, vacations included. CHIP participants successfully maintained important lifestyle changes by eating CHIP approved menu items, taking part in a health lecture and cooking series, and utilizing the ship's first-rate exercise facilities.

Following are descriptions of the cruise written by *Vegetarian Times* Editor Laura Lund and *Vegetarian Times* Managing Editor Carla Davis.

### CHIP On The High Seas

By Laurel Lund, Editor  
*Vegetarian Times*

Is there such a thing as a healthy cruise? One in which the menu is gourmet without gouging your diet? One in which the food is fabulous but not fattening? One in which fitness is fit into a schedule that otherwise might consist of lounging around the pool, sipping exotic drinks?

There is such a thing! I know because I've been on one. Several years ago, 250 like-minded vegetarians and I set sail for Tahiti on a Renaissance Cruise Line ship.

We spent 10 glorious days not only enjoying the Tahitian islands and their native hosts—beautiful both inside and out—but savoring the most wonderful food I've ever tasted.

We knew the same sentiments would be felt by Carla Davis, *Vegetarian Times'* (VT) managing editor, and Denise Kelly-Jones, winner of the VT/CHIP-Shape Cruise who traveled with hubby, Brad Jones, and year-old baby, Christopher, to the Caribbean in February. That's why, when approached about co-sponsoring a wellness seminar aboard a cruise line by Dr. Hans Diehl of the community-changing Coronary Health Improvement Project (CHIP), we were intrigued. Could you indeed "cruise and lose"?

"Definitely," says Davis, who joined health-conscious people from across the country for a seven-day CHIP-Shape Wellness Cruise aboard the smoke-free Carnival cruise ship *Paradise*. Throughout the week, activities included health-related classes, cooking demos, massages, tai chi classes, concerts, social mixers—even a talent show.

"With all the CHIP-Shape wellness activities, I came home from the trip feeling excited, invigorated, and ready to

make positive lifestyle changes," Davis says. "I was most excited that I didn't even gain weight!"

Because CHIP favors a foods-as-grow healthy lifestyle, Diehl worked closely with Carnival to provide cuisine that would appeal to the diverse group of participants, whose ranks included doctors and nurses, teachers and business executives, realtors and retirees. *Paradise* set aside six chefs to prepare menus on par with anything found on the regular dinner menu. "Those CHIP meals were fabulous," says Davis. "Even though the CHIP meals were built around very low sugar, salt, fat, and cholesterol, they were fabulous. "Beautiful as well as delicious. Every night there was an appetizer, entrée and dessert" made from recipes provided by both VT and CHIP and made available exclusively to the CHIP cruisers.

Healthy food choices were not just limited to the dining room. Elsewhere on the cruise you could get soy or rice milk, soy yogurt, egg substitutes for a veggie (cholesterol-free) omelet, low-fat pizzas, gardenburgers, and other healthy options.

Lots of food. Lots of fun. Lots of healthy living tips. All in all, the VT cruise kept everyone in CHIP-top shape!



*These pictures were taken during the CHIP-Shape Wellness Cruise. From left to right: CHIP cruise participants pose for a group photo; the Carnival Cruise ship *Paradise* at anchor in Miami; and on deck aboard the *Paradise*, CHIP participants enjoy social activities and water sports.*



## CHIP In Paradise

By Carla Davis, Managing Editor  
Vegetarian Times

**O**n a scorching Sunday afternoon in Miami this winter, I got a reality check about the food that's offered on cruises. My friend Rob and I, both novice cruisers and both first-time participants in the CHIP-Shape Wellness cruise co-sponsored by VT, had just boarded the Carnival ship *Paradise* for a week in the Western Caribbean.

Forget what you think you know about cruises. You don't have to gain weight (I didn't); you don't have to suspend your fitness routine (Rob hit the gym or track every morning); and you won't be relegated to eating salads and fruit at every meal, no matter what your dietary restrictions. So here are a few personal pointers on how to stay healthy and vegetarian (if you so choose) on a cruise.

- **Ask questions.** You can't cast a sideways glance anywhere on a cruise ship without finding cruise personnel ready and willing to serve you.
- **Take advantage!** This is especially convenient in the dining room. The wait staff

assigned to our table of six adults and an infant fielded all our questions about whether the breakfast bananas were ripe, the black bean soup contained beef broth, or the baked apple dessert came with cream sauce. A few words about the *Paradise* menus: Each menu item comes with a detailed description; those marked as Spa Selections contain less fat, sodium, cholesterol, and fewer calories than regular menu selections. And our CHIP group had special, sumptuous meals created by the *Paradise* chefs just for us! Gourmet vegetarian entrées that were almost too pretty to eat. I also discovered the 24-hour pizza line, and the fruit-and-salad bar that included—to my astonishment—couscous. I also discovered the veggie burgers, ethnic food buffets, fresh fruit bars, and on and on and on!

- **Visit the dining room** ahead of your assigned seating time to view the menu posted outside

the door. Should nothing pique your interest, keep your shorts and T-shirt on, and try the casual buffet located elsewhere on the ship.

- **Go native.** Expand your cultural horizons—and come mealtime, adopt a “when-in-Rome” philosophy in your ports of call. In ours—Belize, Roatan, Honduras, Grand Cayman, and Cozumel, Mexico—I found memorable vegetarian fare with a foreign accent. In Belize, I devoured Creole beans and rice cooked in coconut milk; in Mexico, gazpacho and quesadillas. Even in touristy Grand Cayman I located a Hard Rock Café that I knew served a tasty veggie burger. Go hungry while ashore? Not likely.
- **Stay busy.** No excuses, folks. On any given day, onboard activities can include golf lessons, bridge games, karaoke, trivia contests, aqua volleyball, spinning classes, comedy shows, classical music concerts—and, for the not-so-faint-of-heart, a hairy chest contest. Shore excursions can make the most of your interests in snorkeling, horseback riding, dolphin encounters, river cruises, bicycling, tubing, or city tours. For less active people, the library, Internet café, and casino are sure bets for spending fun time out of the sand and sun. I dare you to let boredom lead your diet astray.

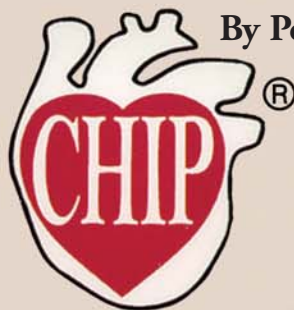
Under the best of circumstances, expect that your cruise won't be perfect. You'll get too much sun one afternoon, despite your floppy hat; you'll spend more money than you'd hoped to (but it was worth it); the candid photos snapped on shore will show a grimace when you'd hoped for a grin. Say “So what?” and remember why you went on the cruise in the first place—to see new places, meet new friends, eat good food—and, oh yeah, to relax. Bon voyage!

For more information on Vegetarian Times or to contact the authors, visit [www.vegetariantimes.com](http://www.vegetariantimes.com). ★

For information about the January 30, 2005  
CHIP/Pritikin cruise, visit [www.chipusa.org](http://www.chipusa.org).







By Peter J. Vedro, MAT

# CHIPPING IN

CHIP can help organizations and individuals alike improve performance and enhance productivity and well-being. Here's everything you need to know to get started with CHIP today and live a healthier tomorrow.

## CHIP Information For Organizations

The following CHIP programs are available and can be accessed through our corporate headquarters in Rockford, Illinois, Lifestyle Medicine Enterprises. Please contact Peter Vedro by phone at 815-962-9091, via e-mail at [peter@CHIPusa.org](mailto:peter@CHIPusa.org), or visit our website at [www.CHIPusa.org](http://www.CHIPusa.org).

**CHIP FastTrack:** The Chip FastTrack is an intensive introduction to the background of the CHIP program including the science, epidemiology, current research, and underlying concepts for personal and organizational health transformation. The program is held in two half-day sessions and is designed to engage community leaders from worksites, faith communities, schools, medical institutions, government, chambers of commerce, and social service organizations.

**CHIP MedTrack:** The CHIP MedTrack is a four to eight-hour intensive workshop for health professionals delineating the science of lifestyle medicine and the role of therapeutic nutrition and lifestyle (for CME credit).

**CHIP FCTP (Facilitator Certification Training Program):** The FCTP is an intensive three-day workshop designed to empower organizations to implement the CHIP Video Program within their organization for employees, families, and retirees.

**CHIP Foundation:** The CHIP Foundation is a non-profit foundation under the auspices of the Community Foundation of Northern Illinois (a 501c3). The Foundation was established to receive philanthropic gifts and legacy donations to continue the work of CHIP as a "community health transformation" template in schools for children and in underserved and disadvantaged communities.

## CHIP Information For Individuals

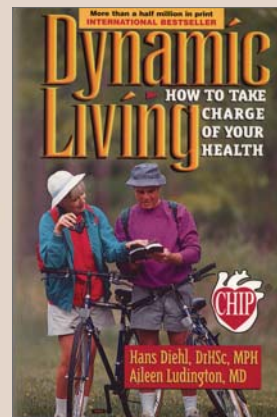
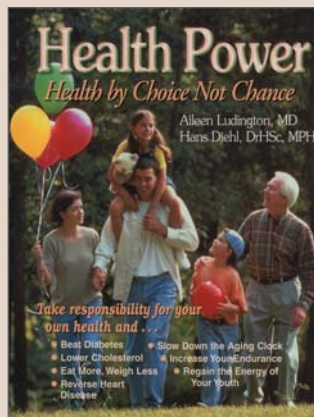
For CHIP books, videos, newsletters, and/or a free catalog, please contact *Better Health Productions* by phone at 909-825-1888, via email at [betterHP@aol.com](mailto:betterHP@aol.com), or visit their website at [www.BetterHealthProductions.com](http://www.BetterHealthProductions.com). Suggested resources available at *Better Health Productions* include the following.

### Books:

*Health Power*—HealthPower is a colorful, reader-friendly publication (256 pages).

*Dynamic Living*—Dynamic Living is a powerful guide on how to take charge of your health using the CHIP model. (Text- and Workbook.)

*The CHIP Cookbook*—This cookbook is packed with healthy recipes to help you live the CHIP lifestyle.





### Videos and DVDs

**Better Health: New Beginnings.** This three video set is a six-hour "MicroCHIP" program (available in VHS only).

**Healthy Beginnings.** This four-hour educational program is available in DVD only.

### Newsletter

**The CHIP Lifeline Quarterly Health Letter.** With a one-year subscription (\$15), you'll receive a free 72-page bonus issue covering the 15<sup>th</sup> anniversary of CHIP.

For other specific resources mentioned in this issue, feel free to contact the Lifestyle Medicine Institute by phone at 909-796-7676, via email at [hdiehl9775@aol.com](mailto:hdiehl9775@aol.com), or visit our website at [www.CHIPusa.org](http://www.CHIPusa.org). We will be happy to assist you in obtaining videos on the *Food Is Elementary* program (a video created by Antonia Demas, PhD featured in the *Food For Thought* article in this issue) or the *Effect of Healthy Food on Children* (a powerful video created by Barbara Stitt, PhD, featured in the same article). You may also contact the Lifestyle Medicine Institute for information on how to obtain a copy of Dr. Campbell's new book *The China Study* (mentioned in *The Problem With Western Medicine* in this issue).

### Additional Contact Information

The following contact information may be helpful to you as you incorporate CHIP into your organization.

- **The CHIP Cruise:** Contact Don Alsbro, EdD at 269-925-3524.
- **The American College of Lifestyle Medicine:** Contact John Kelly, MD at 909-323-6834 or visit [www.ACLM.net](http://www.ACLM.net).
- **The Pritikin Longevity Center:** Contact Paul Lehr at 800-327-4914 or visit [www.pritikin.com](http://www.pritikin.com).

### CHIP Sponsors

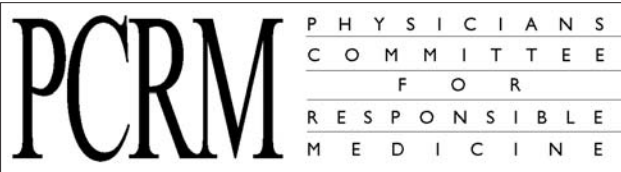
Without these sponsors, CHIP would not have been able to positively affect so many lives and communities over the years. We are grateful for their dedication and support of the CHIP mission.



**The CHIP Alliance.** The mission of the CHIP Alliance, a not-for-profit corporation, is to support the dissemination of CHIP educational programs for schools, faith communities, and communities-at-large, as well as to support research initiatives on the impact of lifestyle medicine to arrest, reverse, and prevent chronic diseases.



**The Center for Science in the Public Interest (CSPI).** CSPI is a consumer advocacy organization whose twin missions are to conduct innovative research and advocacy programs in health and nutrition, and to provide consumers with current, useful information about their health and well-being.



**The Physicians Committee For Responsible Medicine (PCRM).** Founded in 1985, PCRM is a nonprofit organization of physicians and laypersons that promotes preventive medicine, conducts clinical research, and encourages higher standards for ethics and effectiveness in research.



**Bob's Red Mill.** For the past 25 years, Bob's Red Mill has been producing simple, unrefined,

wholesome, whole grain foods, low in cost and high in nutrition and fiber—ideal for a healthy, balanced diet. Bob's Red Mill—"whole grain foods for every meal of the day."



**The Pritikin Longevity Center.** For 30 years, more than 80,000 people have come to the Pritikin Longevity Center, now located in a beautiful South Florida resort, to prevent and reverse overweight, heart disease, diabetes, hypertension, high cholesterol, and cancer risk factors. Pritikin's residential, lifestyle-change programs are tailored to meet the needs of the individual and focus on daily exercise and an eating plan based on natural, whole foods like fruits, vegetables, whole grains, seafood, and limited lean meat.



**The Peoria Area Labor Management Council (PALM).** PALM has been working to build better relationships

between labor and management in the Peoria area for over 20 years. In the early 1990s, PALM started a healthcare subsidiary (LMC Health Programs) as a purchasing cooperative for its member organizations as a way to help control the rising cost of healthcare. Today PALM/LMC has transformed itself into a health promotion organization, after recognizing that the only way to solve the problems of higher and higher costs for healthcare is to help people become healthy.★

*Dr. Hans Diehl, Founder of the Coronary Health Improvement Project (CHIP),  
and this month's Guest Editor, weighs in on the obesity epidemic and discusses  
how to lead the best life by developing a simple diet, a regular exercise plan,  
and strong personal relationships.*



# LIVING THE BEST LIFE

**Dr. Hans Diehl, Founder of the Coronary Health Improvement Project (CHIP), speaks with WELCOA President Dr. David Hunnicutt about obesity, behavior change, and how his CHIP program seeks to change the healthcare system by affecting widespread cultural transformation, and adding a sense of community to the behavior change process. Find out how CHIP is making a major difference in peoples' lives by taking a grassroots level approach to changing health behaviors.**

**Dr. Diehl, how are we as Americans doing when it comes to our diet—both in terms of the quality and quantity of the food we're consuming?**

**DIEHL:** As a society, I think we are largely at the mercy of powerful and manipulative marketing forces that basically tell us what to do and what to eat, and oftentimes we don't even realize it's happening. These marketing forces encourage us to eat food that's simply not healthy, and they encourage us to eat that food in large quantities. And, because we don't understand the content of the diet being pushed on us, we are increasingly in danger of feeding our epidemic of diseases of dietary abundance.

These powerful marketing forces, whether transmitted via television, radio, or billboard, tell us how valuable it is to super-size our meals or to get two pizzas for the price of one. Everywhere we look, we're being seduced to the "good life" as marketers define it, but very few people actually understand that the good life is not so good after all.

This so-called "good life" has produced in this country an avalanche of morbidity and mortality. It has progressed to the point where every second death is now due to cardiovascular disease and every fourth death due to cancer. Our diabetes rates have skyrocketed 700 percent since WW II, and obesity is mushrooming. In view of these facts, it becomes painfully obvious—the good life sold to us may not be so good after all.

What I would like to see in America is not this "good life," but the "best life." The best life is a simpler lifestyle—one characterized by eating more whole foods, foods-as-grown, and prepared in a simple manner. The best life means getting into a regular exercise program, quitting smoking, and putting more time and effort into relationships rather than acquisitions.

**Those are insightful comments, Dr. Diehl. Can you talk about how we're doing when it comes to physical activity?**

**DIEHL:** I think we have a misguided notion that we're actually doing better than we are. We see people jogging around our neighborhoods and we get the impression that, as a society, we're taking the message of aerobic fitness to heart. But this isn't the case. When you really look at it, the population at large is settling quite comfortably into their couches. We've become a society that substitutes watching the sports channel instead of getting out and exercising ourselves.

**It's safe to say then that we're not doing so well when it comes to diet and exercise. With this in mind, how serious is the obesity epidemic in America today?**

**DIEHL:** I think it's our most pressing health challenge. Since 1985, the CDC has annually documented the dramatic weight gain our country is experiencing. The incidence of overweight and obesity over the past 18 years has very clearly increased state by state, year by year. The obesity epidemic is so colossal that one wonders how to turn it around.

One thing is for sure, the healthcare paradigm we've been using for the past several decades is in the process of collapsing. This whole idea that for every ill there's a pill (and of course, a bill), simply doesn't work anymore. While our medical system is very good at diagnosing the ill, then matching it with a pill and a bill, it is a flawed system that has brought us to where we are today. Simply stated, America can no longer afford to operate under this flawed paradigm, neither as individuals, corporations and organizations, nor as a government.

What we need is a system that advocates intelligent, responsible self-care. We need a new paradigm that encourages medical self-responsibility and preventive care, not a system that promotes an attitude of, "Let's fix it when it breaks."

**Dr. Diehl, those of us in the field of health promotion are inundated with statistics and rationales that make the decision to live a healthy life fairly easy. What do you say to individuals who aren't as familiar with the importance of making good health-related choices? How do you get them on track?**

**DIEHL:** There are a number of ways to communicate with these individuals.

I find it works well to engage people in a conversation about their quality of life. People need to understand that their life satisfaction may be seriously hindered by poor health. Their function becomes eroded, they can't do the things they used to enjoy, and oftentimes they're tired and experiencing pain.

For example, making the case for good health on the corporate level is all about doing good business. I tell business leaders that staying competitive in the North American market demands a throttling of the cost of healthcare, which often cuts deeply into corporate profits. This applies even more importantly to the global competition. It will become increasingly difficult to compete in international markets since other countries, especially those in Asia, don't have the extent of our so-called Western-lifestyle diseases. Their workforce is healthier and more productive and the healthcare costs generated by the people who make their products are considerably lower.

Our poor health is bankrupting us! We're now at a point where 15 percent of our gross national income is being devoted to medical care. Even worse, 97 percent of that income is devoted to reactive care—care that is administered only after an individual becomes ill.



**You hear people argue that we can't be doing that poorly—after all life expectancy over the last 100 years has increased almost 30 years. Is this a valid argument?**

**DIEHL:** No, it's not really a valid argument. Many have this notion that—because of advances in medical care and pharmacological interventions—we have increased our life expectancy by some 28 years. But this simply isn't true.

You'll find that we have increased the adult life expectancy by only six or seven years when you examine the life expectancy of adults over the last 100 years. The number we need to focus on is how many years of life have been added to the adult life span. The reason we've seen a 28-year increase in the life expectancy at birth over the last century is related to the dramatic decline in the neonatal and infant mortality rates.

Some 100 years ago, every fifth baby died before reaching the age of one, which largely depressed the life expectancy at birth. But once a person had reached 40, 50, or 60 years of age—and they no longer had to worry about these infectious childhood diseases—then their life expectancy was not that much shorter than what it is today.

Once the proper adjustments for changes in the neonatal and infant mortality rates over the past 100 years have been made, then adults may have gained only six to seven years. And that in spite of enormous and often dramatic advances in modern medicine. Some 100 years ago, we had virtually no medical care system. Physicians were seen as glorified barbers. We had no antibiotics or vaccines. Modern medicine was in its infancy. Even so, adults lived much longer lives than life expectancy at birth data suggests. When people talk about increased life expectancy, it has everything to do with how we view and understand the data.

**Dr. Diehl, let's talk about prevention and our health-care system, and how we might get this thing turned around.**

**DIEHL:** Today, we have the best, most expensive, and most sophisticated medical care system in the world. We are unmatched in the areas of trauma medicine and emergency care. And we are very skilled in diagnosing disease. But being able to expertly diagnose some of our lifestyle-related chronic diseases, and then to match the ill with the pill and a bill is not going to take care of our problems long term. It won't, because it's too simplistic.

There are no magic pills or surgical silver bullets for most of our chronic diseases that strike after midlife—the illnesses that rob us of life and contribute to massive costs and high levels of disability. And to see the surgical scalpel as the cure-all approach to these diseases also has its limitations. Take coronary artery disease for instance. Veins grafted to bypass clogged arteries close up at a rate of 15 to 30 percent within 12 months of the surgery. Cracking the chest for \$75,000 is not only painful, but also costly! And angioplasties to restore coronary circulation also have their limitations: some 45 percent of these \$25,000 surgeries are no longer functional within six months after the surgery.

The fact is, we don't have any pills or easy fixes for these illnesses because they are largely related to the way we live our lives. Some 70 percent of our adult illnesses are related to the choices we make—how we eat, drink, love, handle stress, and whether we smoke and exercise.

I think the greatest potential for turning things around exists within our society and our workplaces. Improved health and well-being will come from providing better education to the masses and providing better systems that reinforce positive choices in personal health. Better health—on a large scale—will



**“Group environments can much more effectively facilitate clinically documented improvements: less pain and medication, lower blood pressure and blood sugar, less angina and lower weight, and reduced medical costs. Supportive groups facilitate learning and understanding. People can exchange helpful bits of information and clinical improvements with others. **It’s in such a cheer-leading atmosphere that a sense of hope can develop.”****

rarely ever be achieved by our traditional healthcare model, a medical model that addresses individuals at a one-to-one level. Such a model is financially unsustainable, and it simply doesn’t work. It rarely ever changes personal behaviors.

### **The best way to change behaviors then would be to get involved in a group program of some sort?**

**DIEHL:** Absolutely. There’s magic in groups. When you look at residential treatment and group approaches, you see that the often-cited stages of change are often dramatically compressed. It doesn’t take six months to move from the preparation stage to the action stage. It moves much faster when people work together and provide mutual support. In fact, in these controlled group environments you can often see dramatic clinical improvements, and disease arrest and reversal, even within days and a few weeks.

Group environments can much more effectively facilitate clinically documented improvements: less pain and medication, lower blood pressure and blood sugar, less angina and lower weight, and reduced medical costs. Supportive groups facilitate learning and understanding. People can exchange helpful bits

of information and clinical improvements with others. It’s in such a cheerleading atmosphere that a sense of hope can develop. With hope, individuals have more interest in developing healthy life skills. They become interested and begin reading food labels, and they learn how to shop for healthier foods—more foods-as-grown—and as they do, they can reduce their food bill by 35 to 45 percent. All of these things can happen in a marvelous way when a support system is in place that then reinforces positive behavior modification.

### **Exchanging negative health behaviors for more positive ones is difficult—there’s no question about that. Aside from taking advantage of the group dynamic, what else do individuals need to do to give themselves a better chance of changing health behaviors for the better?**

**DIEHL:** People need to change their way of thinking and develop more positive thought processes. The first step (and I’ll use weight loss as an example) is to recognize that certain clinical conditions (excess weight) are health erosive and harmful. People have to see the connection between proper weight and proper function, and how that can improve their life.

Next, individuals must develop a belief that there are answers out there that are going to work for them. If they don’t believe this, they’re already stuck. The third step is that individuals have to believe that they can succeed—they have to be able to say, “I can do this. I can simplify my diet and engage in an exercise program.” Once individuals come to the point where they believe these three things, then I think you have a fairly good model for success—provided there’s reinforcement and support over time.

### **Any suggestions of what can be done to encourage and sustain behavioral change in others?**

**DIEHL:** Pay them very simple and honest compliments. Using weight loss as an example: nothing is more important to an obese person who has gone through the ups and downs of dieting and weight loss than to hear someone say, “Wow, I notice there’s a spring in your step.” Or, “My, you’ve got a new outfit on, don’t you? You look great. You’re doing it, aren’t you?” It’s that kind of group support that can make the difference!

### **How important is physical activity in the weight loss equation?**

**DIEHL:** I’m going to be very unconventional on that one. While I understand the effect of exercise on the metabolic rate, I don’t have very much faith in losing weight through exercise. It has been my experience that the key to weight loss is to help people understand the concept of caloric density. You can eat one slice of apple pie (which is about 500 calories), or you can eat five apples. You can eat one tube of Pringles (over 1,000 calories), or you can eat 10 potatoes. Which one is going to fill you up and give you satiety? Once people understand this concept of caloric density, then the light comes on.

**“Once they understand the caloric concentration of many of our heavily- marketed American “foods” and how many miles they have to walk to burn off that extra slice of apple pie, then they become more interested in just replacing that slice of apple pie with an apple.”**

Once they understand the caloric concentration of many of our heavily-marketed American “foods” and how many miles they have to walk to burn off that extra slice of apple pie, then they become more interested in just replacing that slice of apple pie with an apple, instead of walking four miles.

#### **How does all of this fit in with the CHIP program you’ve developed?**

**DIEHL:** CHIP (Coronary Health Improvement Project) promotes a new concept. It promotes a social-ecological model for health, where better health is brought to entire communities and where total system transformation becomes the ultimate goal.

We’ve already talked about the residential group approach to behavior change. These two- to four-week residential group programs do very well. They incorporate all the classical behavioral modification strategies, and they give participants a sense of hope. But when participants leave these controlled and protective environments and come home, they face the same refrigerator, the same friends, and the same fast food restaurants. At once, they find themselves in a situation where, away from their support group, newly acquired health-promoting behaviors are challenged, which are then subject to deterioration and decay.

With CHIP we promote a social-ecological model where we take the message of good health into the community in such a way that we facilitate cultural change and transformation. This brings a supportive mentality to the entire community.

#### **Can you give me some details on how the CHIP program actually functions? How does the community become the support agent?**

**DIEHL:** To start, we go into a community or into a corporate setting with the goal of enrolling at least 10 percent of the population into our health promotion program. This is a 40-hour educational process that involves contracting, goal setting, reinforce-

ment, affirmation, recognition, etc. and it relates to choices people begin to make. It’s not unlike the residential program, but in this model the support becomes widespread, with a sizable portion of the community or worksite taking part in the program.

This group of people, once educated, becomes a “counterweight” to the culture at-large, a culture which is largely manipulated by marketing messages that say, “Eat, drink, and be merry, and tomorrow some physician will take care of you.”

As this “counterweight” evolves, this nucleus of people begins to understand what it takes to lead a healthy lifestyle. They begin to understand that they can indeed make better choices to improve health and longevity and act upon them, even in a manipulative system. As these people (often community and thought leaders) change their behavior, they themselves become markers of effective change, and influence others as role models in the community. Thus, they themselves become behavioral change agents.

For instance, in Rockford, Illinois—a community of 150,000—we now have more than 30 restaurants featuring at least five CHIP approved menu items. These restaurants proudly display their CHIP stickers in their windows. They do this because CHIP participants are impacting the economic power base in the community. When these CHIPers go out to eat, they expect to eat healthy food. As restaurants provide these healthier foods, they meet the needs of their CHIP customers and benefit both economically and in good will. That’s the ecological model in action. It’s exciting and it’s what we need in America today.

#### **Dr. Diehl, your program sounds fantastic. Two questions: Where can people find out more about CHIP, and are there any final thoughts you have for our readers?**

**DIEHL:** You may want to take a look at our website [www.chipusa.org](http://www.chipusa.org). Better yet, log on and evaluate how CHIP may serve you, your community, school, church, and worksite.

As far as leaving readers with some final thoughts, I would like to reiterate the importance of abandoning the old “ill, pill, bill” model. This dominator model, where the doctor knows best and where aggressive intervention often reigns supremely, just doesn’t work very well anymore! To truly impact health status, to improve lives, and to reduce healthcare costs, we’ve got to embrace the ecological model. The bottom line is that it really does “take a village” to affect and sustain change. It’s this model that offers the greatest opportunity of putting “health” back into healthcare. It’s a lifestyle medicine model, that is educationally and lifestyle centered, and uses affordable, time-honored, and interactive approaches.

By engaging entire communities (including worksites, schools, healthcare providers, faith communities, and food service providers) in this new healthcare model, I believe we can bring about an entire system transformation—a transformation where our culture will encourage positive health choices instead of negative ones. When this happens, the effects will be profound and far-reaching for every aspect of society.★



# IN MEMORIAM

On March 24, 2004, the CHIP family lost one of its most ardent supporters. As former Chairman, President, and CEO of the SwedishAmerican Health System, he provided not only a “home” for CHIP to reach out to Rockford, but a platform to demonstrate the potential of lifestyle medicine as a model for the rest of the country. We dedicate this edition to Robert B. Klint, MD, healthcare executive extraordinaire, visionary, and friend.

—Hans Diehl, DrHSc, MPH

Founder, Coronary Health Improvement Project

## Rockford Register Star

### Our Views

## Dr. Klint

### CEO, visionary, hugger did what was right

When Robert Klint retired as CEO of SwedishAmerican Health System three years ago, he wanted to be remembered as “an effective visionary, an articulate spokesman and a good coach to those who took the ride with me.”

As usual, Klint got it right.

Klint died this week of colon cancer. He left a legacy that spans more than the 12 years he led SwedishAmerican, an unusually long tenure in a volatile profession.

**HIS LEGACY INCLUDES** a \$32 million expansion of SwedishAmerican's downtown campus — a project that Klint made sure revitalized the neighborhood as well as expanded the medical complex. The hospital's entrance moved to East State Street, but it was the Charles Street area that underwent the most dramatic transformation.

Driving west on a rerouted Charles, approaching SwedishAmerican, a seemingly impossible vision comes into focus — a synthesis of quaint Victorian homes and a big-city medical complex.

Klint got it right.

He also had a commitment to teaching, which resulted in SwedishAmerican hosting the

city's medical residency program. Before 1995, residents from the University of Illinois College of Medicine at Rockford worked at more than one hospital. The arrangement was more than a bold stroke. Klint's understanding and support for academic medicine endured, the dean of the medical college said.

Klint got it right.

He was a disciple of wellness and believed that a hospital could extend its influence beyond trauma and treating sick people. He brought the low-fat, California-based Coronary Health Improvement Project, or CHIP, to town.

With half of Americans overweight or obese, Klint got it right.

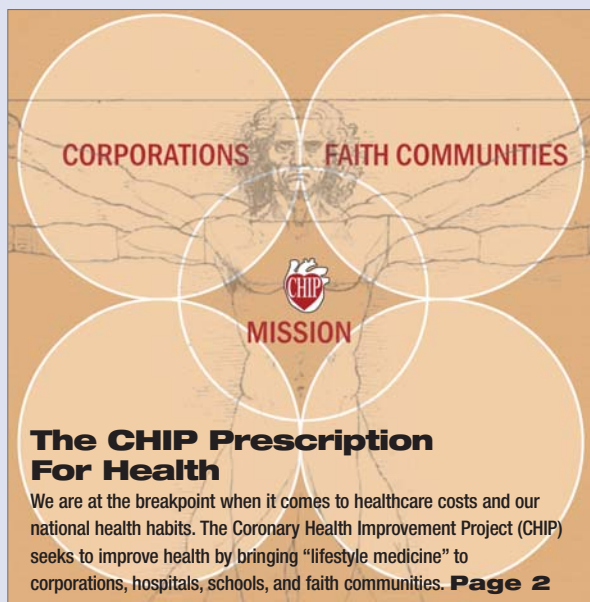
**A PEDIATRIC** cardiologist by training, Dr. Klint could have stayed in Honolulu, where he met his wife, Rita, and where he spent two years at an army medical center.

But the 1960 Rockford East graduate always had it in his mind to come home, SwedishAmerican spokesman Jan Hagenlocher said. Over the 25 years she knew him, he was generous with his vision and with his hugs.

Robert Klint got it right.

This article was originally published in the *Rockford Register Star*, March 26, 2004, in the *Our Views* section. It is reprinted here with permission.

## TABLE OF CONTENTS



### The CHIP Prescription For Health

We are at the breakpoint when it comes to healthcare costs and our national health habits. The Coronary Health Improvement Project (CHIP) seeks to improve health by bringing "lifestyle medicine" to corporations, hospitals, schools, and faith communities. **Page 2**

- 6 The Problem With Western Medicine**  
CHIP Founder and this month's Guest Editor, Dr. Hans Diehl, sets the stage for the CHIP model and explains why Western medicine must evolve, or collapse under its own weight.  
**I By Hans Diehl, DrHSc, MPH**
- 14 Good Medicine**  
The Coronary Health Improvement Project (CHIP) helps individuals make simple lifestyle changes, allowing them to "get healthy by choice—not by chance."  
**I By Hans Diehl, DrHSc, MPH**
- 20 Change Of Heart**  
Roger L. Greenlaw, MD, Medical Director at the SwedishAmerican Center for Complementary Medicine, is leading a movement that encourages physicians to embrace preventive medicine, and put the word "health" back into healthcare.  
**I By Roger L. Greenlaw, MD**
- 26 The Rockford Files**  
The CHIP program has proven itself as a viable model to affect community health transformation. In fact, six worksites in Rockford, Illinois have proven that CHIP changes lives and betters business.  
**I By Hans Diehl, DrHSc, MPH, Roger L. Greenlaw, MD and Peter J. Vedro, MAT**
- 30 Have Faith In CHIP**  
Places of worship bring together active individuals with a passion for improving the world around them. Don't miss this feature on how CHIP has been incorporated into two vibrant faith communities.  
**I By Mark Hunter, Harold Burden, MPH and Dena Guthrie, RN**
- 34 Food For Thought**  
These two school nutrition programs help combat childhood obesity, enhance the educational environment, and teach food skills for life to our nation's students.  
**I By Antonia Demas, PhD and Barbara Stitt, PhD**
- 38 CHIP-Shape**  
In this "high seas" feature, we'll take a look at the CHIP cruise, an inspiring and relaxing way to "cruise and lose."  
**I By Laurel Lund and Carla Davis**
- 42 Chipping In**  
Several resources are available to help you bring the CHIP model to your organization. Check out these materials to learn how you can get started with CHIP today, and live a healthier tomorrow.  
**I By Peter J. Vedro, MAT**
- 44 Living The Best Life**  
Dr. Hans Diehl weighs in on the obesity epidemic and discusses how to lead a life of health, meaning, and purpose by developing a simple diet, a regular exercise plan, and strong personal relationships.  
**I INTERVIEW With Hans Diehl, DrHSc, MPH**

ABSOLUTE ADVANTAGE  
UP NEXT...

## The Mediterranean Diet

There is an epidemic of obesity in the United States that has occurred during an explosion of interest in, and access to, nutrition information. However, much of the information on nutrition and weight management is contradictory, which seems to have only led to a very confused public.

In the next issue of *Absolute Advantage*, Guest Editor Mary Flynn, PhD, RD, LDN, Assistant Professor of Medicine at Brown University and co-author of the book *Low Fat Lies, High Fat Frauds* and the *Healthiest Diet in the World*, will offer information to help us better understand the obesity epidemic, and will uncover the science behind the Mediterranean diet, an intriguing strategy for weight management and health improvement. Don't miss the next issue of *Absolute Advantage*!

ABOUT THE  
WELLNESS COUNCILS OF AMERICA

The Wellness Councils of America is one of North America's most trusted voices on the topic of work-site wellness. With over a decade of experience, WELCOA is widely recognized and highly regarded for its innovative approach to worksite wellness. Indeed, through their internationally recognized "Well Workplace" awards initiative, WELCOA has helped hundreds of companies transform their corporate cultures and improve the health and well-being of their most valuable asset—their employees.

All rights reserved. No part of this document shall be copied, stored, or distributed in any way without written permission from The Wellness Councils of America.