

A CURE IS NOT WELCOME
America's Successful Failing
Health System

Copyright © 2004 Desmond Paul Allen

Published by:
LaRue Publications,
PO Box 2194, Opelika, AL 36803-2194 USA

ISBN 0-9726866-0-6
First Print

Library of Congress Control Number: 2003116884

Cover by Cathi A. Stevenson

Edited by Sharon Hrabina

PRINTED IN THE UNITED STATES OF AMERICA

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, recording or otherwise beyond that permitted by Section 107 or 108 of the 1976 United States Copyright Act without the prior written permission of LaRue Publications.

This material is designed to provide accurate, authoritative information within the genre herein discussed. It is to be understood that neither the publisher nor the author is engaging in medical or professional advice of any kind. This material is merely informative as to the current state of the healthcare industry. If healthcare issues are of concern on a personal level, the services of a competent healthcare professional should be sought.

A CURE IS NOT WELCOME
America's Successful Failing
Health System

by
Desmond Allen, PhD, ND, MBA

The Objective

The purpose of this work is twofold. First, it indicts the American medical and pharmaceutical establishments (very real and elite societies of powerful movers and shakers within the allopathic community) for their ethical sins of neglecting to promote health and, even worse, actively engaging in the destruction of the same. Both consciously ignore proven therapeutic advances in order to promote their self-serving agenda of self-preservation and greed. While many clinicians may be excused due to naïveté, the medical establishment knowingly disseminates misinformation.

The second objective (and one that illustrates the first) is to alert readers to more than two decades of ignored scientific research concerning the biological effects of nitric oxide and its biochemical precursor, the amino acid L-Arginine. Other neglected research would also illustrate medicine's dark side, but this most important research offers enormous potential to heal a nation sickened by cardiovascular disease—an outcome that would drain the very life blood of the medical industry.

Regardless of the extensive research with astounding outcomes (some of which even won the 1998 Nobel Prize for Science and Medicine), a dearth of information persists among both allopathic and naturopathic clinical practitioners. Allopathic physicians neglect this research because no drugs are involved and thus no prescription—the symbol and means of their significance—is necessary. The elites of allopathy recognize that the continued failed treatment of cardiovascular disease is the backbone of their financial success and by-in-large their very existence; therefore there is little ambition for its cure.

On the other hand the alternative healthcare community, which is generally not well read in allopathic research, is simply not aware of these significant findings.

Finally, the very real hint of sarcasm and cynicism that is strewn across these pages is not without cause. From both a professional and a personal vantage through the years I have developed a very healthy sense of skepticism toward allopathic dogma. For your personal wellbeing, I would advise you to do the same.

Desmond Allen, PhD, ND, MBA

White Collar Corruption	44
Chapter Two, The Days of Yore	47
Those were the Days	48
Show Me the Money	48
No Time to Doctor	50
Where are the Humanitarians?	53
Where is Nobility?	54
Chapter Three, Inept Education	55
Tradition is Safe for the Insecure	57
A Typical Medical Education	55
The Credentials are Meant to Fool You	58
An Academic Shame	60
A Profitable Franchise	61
Medical College Curricula	63
Typical Three Year MD	63
Typical Four Year MD	65
Another Typical Four Year School	66
Yet Another Typical Four Year School	67
Insecurity Verses Professional Security	68
Chapter Four, The Code of Silence	69
Error and Misdiagnoses is the Norm	70
A Matter of Faith	72
Mum's the Word	74
A Case of Iatrogeny	76
Medical Incompetence Goes Unpunished	80
Everyone Knows But the Patient	81
National Practitioner Data Bank	82
Physicians Recognize the Problem	84

Chapter Five, Your Physician,	
Your Local Drug Pusher	85
The Most Profitable Industry	86
Government Mandated Drug Use	87
Writing Prescriptions is a Business	90
Creating a Need	90
Pandering	92
Chapter Six, Lies and False Advertisement	95
Advertisement Dollars and Ethics	96
Research Articles and Drugs Companies	97
“Me Too”	101
Costing More Than Ever	103
Exploiting Senior Citizens	104
Are the Drugs Necessary?	105

PART TWO

*Priority # 2, Secure the Market to Insure
the Accomplishment of Priority #1*

Chapter Seven, An Epidemic and the	
Neglected Cure	111
Financial Matters	113
The Old and the Young	114
The Endothelial-Derived Relaxing Factor	115
Nobel Prize	116
Some Recent Studies	118
Chapter Eight, Hurry up and Take Your Time	123
Physician Neglect	124
Spinning its Wheels	125

Chapter Nine, The Historical Development of	
L-Arginine and Nitric Oxide	131
The Endothelial-Derived Relaxing Factor . .	133
Arginine-Derived Nitric Oxide	133
Entrepreneurs	137
Chapter Ten, Battle of Beliefs	141
Opposing Belief Systems	141
Rational Verses Empirical Data	144
Common Ground	145
Political Maneuvers	146
The Religion of Allopathy	150

PART THREE

Priority # 3, Conceal All Clinical Findings That Do Not Promote the Accomplishment of Priority #1

Chapter Eleven, Side Effects,	
The Benign Cost of	
Allopathic Treatment	157
Hypertension	157
Benign Side Effects	158
Not So Benign Side Effects	162
A Day in the ICU	163
Chapter Twelve, Poisoning the Nation	167
A Diet of Fat, Sugar and Chemicals	168
Physicians are Part of the Problem	172
FDA and Politics	175
Medical Establishment	
Accepts the Poisons	177

Chapter Thirteen, Nutrition by Attrition	179
Nutrition is Slowly Gaining Ground	179
White Papers	181
Hard to Admit	183
Department of Surgery, Scientific Institute	186
Conclusion, Cease Relying on Allopathy's Proven Failure	189
Appendix A, L-Arginine as a Therapy	195
The Essential Non-Essential Amino Acids .	196
Reversing Vascular Dysfunction	196
Lowering Hypertension	198
Known Benefits of L-Arginine Supplementation	199
Appendix B, Oral L-Arginine, Dietary and Lifestyle Changes.	203
Appendix C, L-Arginine Case Studies	207
Case # 1	208
Case # 2	208
Case # 3	209
Case # 4	209
Case # 5	210
Case # 6	210
Case # 7	210
Case # 8	210
End Notes	213

Preface

Science has made an amazing discovery that the American medical community does not want you to know. It cannot afford for you to know; the implications are far too reaching.

The general public knowledge of this Nobel Prize winning discovery would revolutionize the prevention and treatment of cardiovascular disease. But the treatment of cardiovascular disease—I should say, the ineffective treatment of cardiovascular disease and the multiple co-morbidities it generates—is the core of modern medical economics. The stability of the entire industry depends upon it; and it is no exaggeration to suggest that the cure would affect the very survival of allopathic medicine as it currently exists. This orchestrated neglect of your health is paramount to the industry's continued success. Simply stated, A CURE IS NOT WELCOME.

This is not to say that all physicians are crooks or even that they are simply in it for the money. Many physicians, indeed in my experience, the vast majority of physicians truly believe they provide

an essential service and they have a genuine concern for their patients' wellbeing. Their education teaches them to dispense drugs. It is all they know and in their myopic view they truly believe they are doing good. But despite their honest intentions physicians often do more harm than good; for unwittingly they are part of a faulty philosophy with a religious adherence to intervention as the first and only line of action. Justification for an intervention is not the concern; the mere act of intervention is the principal.

Allopathic physicians—better known as medical doctors—speak of health but in reality they know little and care even less about it. Disease is their business and money is the bottom line. They are trained to diagnose (although accuracy is optional) and treat disease. Disease is a negative thing; healthcare is a positive thing—it is not their facility, nor even their interest.

Barring relatively few, nearly miraculous and mostly surgical procedures (for which a minority of capable doctors deserve great praise), the medical doctor's mission is to seek and destroy—to detect disease and kill it, or a least arrest it. The preferred weapon is some sort of toxic pharmaceutical intervention.

A plethora of approved, money-making, disease-seeking tests are available for the hunt. Even the least grounds for suspicion can justify a disease exploration. For example, after a coffee and donut preceded by indigestion for the past week, a patient arrives in the emergency room with acute upper gastric pain. The initial antacid yields no relief; but the electrocardiogram is normal and the routine precautionary cardiac treatments with oxygen, nitroglycerin, baby aspirin and morphine fail to alleviate the pain, thereby effectively ruling out a heart attack. Ultimately a medication that inhibits gastric secretions relieves the pain, thereby confirming a gastric disorder. Nevertheless, the patient is admitted to the hospital and put through a cardiac workup complete with lab studies, cardiac monitoring, a

cardiac stress test and an echocardiogram before the gastroenterologist performs an endoscope and ultrasound. Forty-eight hours and thousands of dollars later the patient leaves with a simple prescription for Pepcid.

Why all of these unnecessary tests? Simple. Because they are approved for reimbursement. Of course the solemn, authoritative argument is made that even though it clearly appears to be a gastric disorder, the cardiac possibility must be ruled out. That this was already ruled out by the initial, inexpensive cardiac interventions in the emergency room is overlooked as an insignificant detail. But nobody complains; indeed, the physicians are praised for doing such a thorough job.

In this disease hunt, often no suspicion at all is necessary to justify a quest. Something as simple as age, gender or race is sufficient. It is a win-win situation, even if no disease is found a fortune is made looking for it. In addition, many contrived disorders (albeit normal life conditions) are approved for medication therapy; for at all costs, the physician's primary role is to pimp drugs for the pharmaceutical industry.

It is for this reason that, although physicians know unwarranted antibiotic therapy generates strains of super resistant microbes, they continue to prescribe antibiotics for upper respiratory viral infections. Of course nothing is accomplished, nothing beneficial anyway. But it does affect great damage to the overall health of the patient and ultimately to the overall health of the nation.

This mindless philosophy of artificial intervention is also the reason physicians advise cholesterol lowering drugs to anyone with even a modestly elevated cholesterol. That biochemical cholesterol is the body's natural attempt to contain the effects of advancing cardiovascular disease is of little concern; nor is there concern that these unwarranted drugs wreak great havoc on the body's liver; nor

that the drugs are associated with many deaths.

What physicians are concerned with is that this is the current party line—the current therapy dictated by the industry and they comply unquestioningly, albeit ignorantly. But even in their ignorance they honestly have the patient’s wellbeing in mind. Since physicians genuinely believe, with religious fervor, in the doctrine of the pharmaceutical industry, in their minds compliance with the party line is essential. Curiously, that these doctrines change as often as the policies of third-world governments, and that the new doctrines often contradict the old, is also of little concern. But such is the nature of blind faith.

Interspersed with some admittedly anecdotal accounts from my personal thirty-year experience in the business and clinical world of allopathic medicine, you will find solid research citing allopathic discoveries and disclosures about its ineffective and often harmful practices. You will also learn of the simple, effective but ignored, treatment for cardiovascular disease based upon research for which the 1998 Nobel Prize in Medicine and Physiology was awarded. Knowledge of this research could save your heart, and your life.

Desmond Allen, PhD, ND, MBA

Introduction

The Undiscovered Art of Medical Diagnosis

Please grant my indulgence with the following personal, anecdotal introduction. Perhaps I am forcing this 2001 article into service; but it so readily illustrates one of the major problems in modern healthcare that I could not refrain.

A particularly disturbing display of medical incompetence by a seasoned emergency room physician in a well known medical center in the Northeast provided the final motivation for this work. To my embarrassment, after nearly three decades of first hand observation and participation in the blatantly ineffective (sometimes even deadly) clinical arena of allopathic medicine, it was the ignorance and incompetence of these practitioners concerning my own health that finally provoked me to expose this self-serving,

clinically deficient, pseudo healthcare system. A system that has run amok with its mostly inappropriate interventional philosophy and the absolutely inept education provided for its master practitioners—the doctors of medicine.

It had been a long day . . . actually a long week, dividing attention between project deadlines, personnel issues and sanity. But it was Friday, mid afternoon and just hours from a three-day weekend. I had one of those exacting, demanding management jobs in clinical healthcare; barring the highly remote possibility of exposure to some horrible organism it could hardly have been classified as dangerous. Casually and unconsciously I pushed with my left leg to roll my office chair back as I reached for the file drawer. As if in slow motion I felt something in my knee migrate medially and lodge itself in a decidedly awkward position. Even before the pain I instantly understood this was not a good thing.

With expectation, I slowly extended my calf. Intense pain flared immediately. At once I retracted to the original position and the pain subsided. I tried to flex my leg—to draw my calf toward my thigh but again the pain erupted, demanding that I return to the original position. I obeyed dutifully.

Having a fairly good understanding of anatomy I calmly thought through the situation. I considered the physical structure of the knee: joint, patella, tendons, ligaments, muscle, bursa. But I must admit I did not consider the vessels. Perhaps logically or more likely intuitively they did not seem relevant. Pushing, squeezing, probing and pondering—considering for at least thirty seconds—what might have caused this surreal sensation and subsequent reality of pain I concluded that a ligament had slipped out of place. I then massaged and manipulated the joint for at least half an hour, hoping to return the ligament to its proper location. It did not work.

A colleague attempted to extend the leg for me but the pain was

unbearable and I had to make him stop. Finally, with great chagrin, I called for help. My employer insisted that I visit the emergency room—our emergency room of course, this being a major medical center in the district. My experience over the next several hours (which I will share shortly), was yet another experience with the medical incompetence of which I am so familiar.

Case Studies in Ignorance

Later that evening I contemplated each time I had sought medical attention throughout my life. Being trained in research and having a considerable amount of medical knowledge and experience, I determined to review the accuracy with which my various medical conditions had been diagnosed and treated. The results were nothing less than startling.

To separate the meaningful from the mundane, I overlooked routine physicals, scheduled follow-ups and minor first-aid type attention. Nor did I include dental problems. The standard by which each physician's diagnosis/misdiagnosis was evaluated was published medical literature; some were confirmed by other physicians and all confirmed by outcome.

The first significant medical incident I can recall happened when I was fourteen years old. It was a beautiful summer day in San Diego, California. There was an accident that involved a Honda-50 motorcycle, gasoline and me. I suffered second and third degree burns on my left arm and left leg. Admitted to the local children's hospital, my arm was placed in bandages that were changed regularly while my leg, which was burned just as badly, was placed in a cast.

After a few days, I was discharged with the cast in place. Back home in northern California, doctor "R" was infuriated at the cast. I can still see the look on his face as he cut the plaster from my leg and

found new skin growing into the underlying gauze bandage. He had no choice but to rip the gauze loose, along with my new skin. I can still remember the pain as well. It was smart with an intense tingly, burning sensation. I bare the horrible scar to this day.

Why the attending physician would treat one burn correctly and the other like a broken bone is a mystery to me. Maybe I was a lab experiment for his revolutionary burn treatment. Maybe he had just read and misunderstood some obscure research article. Unfortunately, in those days we did not think of malpractice suits quite so readily. I think in retrospect it might have been an uncontested case.

Years passed before I sought medical attention again. In my mid-twenties, I experienced a skiing accident that caused prolonged stiffness, soreness and swelling in the left knee. It lasted for several weeks but eventually subsided, remaining dormant for many years. Then after sitting immobile for several hours while salmon fishing on the mouth of the beautiful Klamath River on a particularly cool autumn day it flared again. As before considerable soreness, stiffness and swelling ensued. But this time the pain lasted for several months. Every time it seemed to be getting better it would take another turn for the worse. Finally I relented and decided to see a physician.

By now, having studied and worked in healthcare for several years, experience had taught me to view a physician's ability to correctly diagnose and treat illness with skepticism. Therefore I was compelled first to research the knee myself, to have a good idea of the problem before I visited the physician. I concluded that I had an inflammation of the bursa; likely an onset of bursitis secondary to the old skiing accident.

Dr. "P" performed a thorough examination and suggested that it might be a Baker's cyst. Having just reviewed every textbook concerning the knee in the hospital's medical library, I realized the symptoms of a Baker's cyst and an inflamed bursa were similar.

However, given my young age and my history (the skiing injury), I highly doubted the Baker's cyst. But I was encouraged that at least he was thinking along a similar diagnosis; that is, at least it was a diagnosis concerning the bursa. In his uncertainty he sent me to an orthopedic surgeon for a second opinion.

The orthopedist stormed into the room, slapped my x-ray against the light, studied it for at least five seconds, rushed across the room to my knee, pushed and squeezed for a few more seconds then smartly stood back and declared, "You have a condition called plica."

"What?" I said. I thought to myself, 'I don't recall reading anything about this.'

"A ligament," he answered, "has slipped under the patella. We'll do arthroscopic surgery with two small incisions: one above and one below your knee," with this he pointed to the incision sites. "You'll be as good as new in about five weeks." Before I could say a word, he turned his heels and was out the door, calling back as he left, "My office will call you for an appointment."

I was quite disappointed as I left the office. The receptionist called out, "I'll be calling you soon to set up an appointment." Even as she spoke I knew I would not be responding to the call.

At work a few days later, limping through the hospital corridor, doctor "P" happened by. "Did you see doctor 'S'?" he asked.

"Yeah," I said with obvious discontent mingled with astonishment, "he thinks it's plica and wants to do arthroscopic surgery."

"I thought he might say that," he smiled coyly. "He just returned from a conference and he's been real hot on that lately."

I told Dr. "P" I was not convinced that it was plica and that I was not going to have surgery. He agreed. I also told him that I doubted

the Baker's cyst diagnosis as well and that I was simply going to treat it like bursitis.

In time the flare-up subsided and in the years to come the flare-ups became less frequent and less severe. Now, more than two decades later, it has been many years since I've experienced even a mild episode of the "bursitis symptoms." Who knows what trouble I might have encountered through the years had I followed through with the unnecessary but popular arthroscopic surgery?

The next year I suffered a likely broken nose while playing basketball. Having developed an obvious infection in the nasal septum, after several days the swelling became quite intense and needed immediate attention, for which doctor "P" prescribed an antibiotic. Granted, this was not a situation that required a master of medicine to figure out, but it was a correct diagnosis and treatment. As insignificant as this might sound, I mention it because it is one of the few times that I have been diagnosed and subsequently treated correctly.

Later that same year, after many weeks of reading in what proved to be an unfavorable posture, I developed a very stiff neck that burned with intense pain. Knowing that an MD would only prescribe painkillers or surgery, I elected to see a chiropractor. To my amazement he performed a quick manipulative move and my neck snapped into place. The pain left immediately. I was impressed.

Years later when I experienced similar neck pain, only considerably less intense, I decided to visit a chiropractor again. His techniques were different than the first. He performed a short massage and spent the next twenty-minutes giving me a sales pitch—inviting me to attend weekly telephone sales meetings that, I ascertained, worked on the pyramid scheme. I left still in pain and quite disappointed. Over the next couple of months, despite my

non-interest, he continued calling to invite me to the sales pyramid meetings. I suspect I should have reported him to his licensing body, but I did not.

Still in pain, I decided to visit another chiropractor. His methods were quite different than either of the others. He was, shall we say, a brutal contortionist. He advised me to spend some time each day lying on my back with a nerf ball placed under my spine to help stretch the tendons and to make them more elastic. It was something he said he did almost daily. I followed his instructions and soon developed a piercing pain that radiated out of my spine, up my shoulder and down my right arm. The pain was such that I had to hold my right arm above my head to experience even the slightest relief.

He had no idea what was wrong, but gave me another massage, twisted me like a pretzel and suggested that I hang from a pull-up bar several times a day to stretch the muscles.

The next day I attempted to hang as suggested. I could feel the tension in my arm as the weight of my body stretched the muscles. After a minute or so I released, not wanting to overdo it. Later that day I tried it again but this time as I released from the bar there was a horrible “pop!” in my elbow and suddenly my hand and forearm were numb. At once, I knew that my ulna nerve was damaged. ‘This is serious,’ I thought, and instantly I knew my world had changed.

Still in pain and now sporting a dead hand to boot, again I relented and decided to visit an MD. As expected, Dr. “M” prescribed a mild painkiller and a muscle relaxant. During the visit, he noticed that my blood pressure was elevated. This caused him concern. Upon my return visit a few weeks later with my right arm now withering and atrophic from paralysis he was only concerned with my elevated blood pressure. He placed me on the drug of the month and instructed me to come back for follow-up in a couple of

weeks.

There were several follow-ups in the months to come. My arm continued to wither and the atrophy now involved my right pectoris. Still, other than the pain pills and muscle relaxants, his only concern seemed to be my blood pressure. Exhausted by the entire process, alas I demanded that he address the withering arm. I took my shirt off and showed him my equally withered pectoris. He looked at it, compared it with the left pectoris and with a straight face, actually believing what he was about to say, he asked, “Have you ever heard of kyphoscoliosis?”

“Of course!” I exclaimed, somewhat bewildered, “I know what kyphoscoliosis is.” As I said this I was thinking, ‘But I’m certain you do not!’ I asked, “Are you saying I have kyphoscoliosis?”

“Yes,” he said.

I remained speechless, dumbfounded by his ignorance. ‘What would be the point,’ I thought, ‘of even attempting to discuss this with him?’ Besides, what would I discuss? Would I try to explain my problem again or would I educate him about kyphoscoliosis?—A lateral curvature of the spine with a corresponding hump. My back was as straight as an arrow, always had been, was then, and still is. The absent tell-tale hump, is even a greater mystery; possibly a figment of his imagination or—and more likely—in his ignorance, a central detail he did not realize should be present.

Of course, I never returned. Obviously, he had not listened or paid attention to the progression of my symptoms, nor was he capable of understanding their significance. From the beginning of his treatment regimen I had experienced the undesirable side effects of the blood pressure medicine. Fed up and desperate, I determined to treat myself—both my paralysis and my hypertension.

Unsure as to the expected prognosis for my damaged ulna, I

began an aggressive exercise routine. I still had movement in my thumb and was able, ever so slightly, to flex my middle and ring fingers. To flex or extend the other fingers—especially the first finger—was impossible. There was minimal enervation, no strength and virtually no movement. But with my homespun physical therapy, over the next two years I was slowly able to gain flexibility and build strength. Although I still have some numbness in my little finger and the strength in my hand and arm is considerably diminished, I estimate that I have recovered about ninety percent use. Some atrophy is still present and I doubt that I will ever fully recover the lost muscle mass.

As for the blood pressure, after minimal research I decided to deal with it via nutrition. Within two weeks of taking L-Arginine, potassium, magnesium, calcium and garlic supplements, I had completely weaned myself from the medication and my blood pressure was lower than it had been in nearly a year on the prescribed drug. And of course the undesirable side effects had also vanished. Now many years later I continue the nutritional supplements and my blood pressure remains normal.

My next medical condition was mild in comparison. I acquired a mild infection on my right eyelid (perhaps one of the job oriented organisms I mentioned). This time I elected to see a doctor of osteopathy who also practiced some aspects of alternative medicine. He correctly identified the problem and prescribed an antibiotic. Again, I mention this milestone because it is another of the few correct diagnoses and treatments I have received.

Back to the Emergency Room

Now we return to my final and most recent medical experience, the one that actually prompted this work. We take up where we left

off with my arrival to the emergency department, my knee locked in place and in severe pain. Beginning with the triage nurse, then the attending nurse and the technicians, I was asked to rehearse the scenario time and again. Somehow I felt no one was really listening; that is, listening critically in an attempt to associate the apparent cause with the present problem. When at last I recounted the scenario to the physician again it seemed to fall on deaf ears. My first clue was immediate. I told him of the sudden movement that seemed to be my ligament dislodging and resting in an undesirable position.

“That was the blood squirting out,” he responded.

What he didn’t know was that logically, or intuitively, I had already ruled out the vessel idea. I thought to myself, ‘He doesn’t really understand what I am telling him.’

As these thoughts swirled in my head he continued with the prognosis, “Before you leave, we’re going to have to straighten that leg. Either you can straighten it, or we can straighten it for you.”

“I hope you know some good manipulative maneuvers,” I pleaded.

“Yeah,” he said, “yank like hell and run.”

My response was terse and no doubt cynical, “You’re not even sure what’s wrong, but you want to straighten it with brute force. If it is straightened, I’ll do it myself.” As I spoke, I had visions of my damaged ulna nerve and subsequent paralysis resultant to following the advice of another medical adviser who didn’t really know what was causing the pain. Although I knew no nerves were involved, there were still muscles and ligaments; neither of which I wanted ripped apart by a violent manipulation performed out of ignorance.

After the initial examination I was sent to the x-ray department to suffer a series of painful postures. There I learned (once the

radiologist had looked at the films) that my knee would likely need to be repaired by an orthopedic surgeon. ‘Oh yeah,’ I thought, ‘I’ve heard that before.’

As I was rolled from the x-ray department I was very glad to see a friend—who happens to be a physical therapist—standing outside the emergency room. ‘At last,’ I thought, ‘someone who understands the anatomy of the knee.’

I quickly rehearsed the situation again. She listened carefully to every word, examined the knee and within the similar thirty seconds that it had taken me, concluded, “It is possible that your meniscus has become lodged in the joint. This would coincide with the pain and cause the present symptoms.”

I was elated. Here was someone whom I trusted, someone who was extremely knowledgeable about the knee and whose diagnosis agreed with what my body (not to mention my intellect) was telling me. “Will I damage anything if I straighten the leg?” I asked.

“No; but it’s going to hurt and you will need to straighten it.”

Back in the emergency room, the physician returned to report the official findings of the radiologist and to examine the knee again. He said, “I’m concerned that tissue has lodged under the patella.”

“Plica?” I interrupted. This was my second indication that he had no idea what he was talking about.

“Well, yes,” his surprise was clear to everyone present.

“No,” I said, “not again. I have traveled this path before; only with completely different symptoms.” I thought to myself, ‘Is this the only diagnosis for knee trouble that they learn in medical school?’

I expressed my displeasure with his assessment and quickly recounted my knowledge of plica, and my experience with the

orthopedic surgeon years earlier.

“Well,” he said, “you still need to straighten the leg.”

Encouraged by the physical therapist's assessment, I decided to comply. Slowly and very carefully, I began extending my leg until the pain commenced. I would hold that position for several seconds, then retracted the leg to ease the pain, rest for a few seconds and repeated the process. Extending a little further with each attempt, I continued this for about forty-five minutes until the leg was nearly straight. Before calling for the physician I tried to manipulate and massage the knee as before—this time specifically hoping to dislodge the meniscus from the joint. It still did not work.

The physician examined my knee again. Now that it was all but straight it presented different prodding options. What he said next was astonishing. It was also the third and most conclusive indicator that he spoke of that which he knew not. Abandoning the plica diagnosis, his next diagnosis was ominous.

Now he explained that the patellar ligament was torn and would require major surgical repair. “We don’t see this injury very often,” he assured me, “but there happens to be another fellow just a few beds away with a similar injury. Only yours is worse. About one in eight of these types of injuries need surgery. Yours is that one.” He even had me feel the torn ligament for myself.

As he spoke, and as I felt my “torn ligament,” I thought, ‘He has no idea what he’s talking about or what he’s doing.’

Then he felt my other knee and said, “Feel this. You have arthritis in this knee and you’ll have to have that looked at as well.”

‘Is this guy for real?’ I thought to myself. Not only have I never had even the slightest symptom of arthritis in that or any other joint, but he has made this diagnosis by simply holding his finger on my

completely immobile knee for all of three seconds. There was no x-ray, no blood work, no history, and certainly no symptoms to warrant suspicion, much less a diagnosis.

I remember thinking, ‘This could be an episode on Twilight Zone.’

His plan was to immobilize my injured knee, prescribe painkillers and crutches, and refer me to the orthopedic surgeon. Still experiencing severe pain with even the slightest movement and desperate for relief, I was compelled to comply. To place the knee immobilizer the technician slipped one hand under my knee and the other under my calf. As she gently began to lift my leg the pain intensified immediately and grew, directly proportionate to the number of degrees between it and the gurney. Naturally, sensing the need to be macho in the care of my co-workers, I remained silent and I consciously tried to relax knowing the augmented pain would only last a few seconds. Then just as unexpectedly as the injury had occurred a few hours earlier, the knee instantly popped back into place. A sudden sensation of warmth flooded the knee and the pain vanished immediately. It was as if nothing had ever happened.

“Stop!” I interrupted. “I realize that you have to continue with the immobilizer, but my knee just popped back into place and I want the physician to see this . . . for his own education.”

He was more or less speechless and I would hope embarrassed after his lengthy explanation of the severity of my injury and the need for major surgery. Saving him the embarrassment of another “bursting vessel” explanation, I didn’t tell him about the sensation of warmth I felt as the ligament returned to its home.

Still, as expected, in order to be released from the emergency room (other than against medical advice) I had to follow the plan. I donned the knee immobilizer and the crutches, received the

prescription for the painkillers and the orthopedic referral and went home. As soon as I got home I removed the hardware. Of course I never consulted the orthopod. For many months I was careful not to repeat the movement that caused “the meniscus to become lodged in the joint.” I took it easy, allowing time for any possible damaged tissue to heal. As for the arthritis in the other knee, the non-symptoms continue.

The Pitiful Diagnostic Percentages

This cursory review of my medical care is most interesting. One of the chiropractors was more interested in soliciting me for an apparent pyramid scheme than addressing my pain. Another actually gave me advice that caused physical damage; and when I foolishly returned to him he followed-up with advice that caused even greater damage. One physician treated a severe burn like a broken bone. A surgeon seemingly diagnosed my knee problem while at a conference, even before my examination. Another physician watched idly for months as my arm muscles grew atrophic right before his eyes. The emergency room physician, who sees multiple bone and joint injuries every day, refused to listen to my symptoms and finally determined I had a condition not even remotely related to the actual problem.

Of the eight conditions for which I had sought medical attention, there were sixteen diagnoses, twelve by medical doctors and four by chiropractors. If I am liberal, giving credit for doctor “R’s” correct treatment of my burn once I was discharged from the hospital, and for doctor “M’s” diagnosis of high blood pressure, along with credit for the diagnosis of the two minor infections, there were four correct diagnoses and treatments by the medical doctors—in all, a thirty-three percent accuracy. Of the doctors of chiropractic medicine, there was one in four correct diagnoses and treatments, for a comparable

twenty-five percent accuracy.

Some might argue that these experiences merely reflect isolated incidents and cannot be considered an accurate representation of the entire medical profession. I would agree. Unfortunately numerous and more scientific studies make this a moot point. A hundred years of similar pitiful figures compiled by allopathic researchers themselves indict the medical profession's inability to diagnose accurately. In a later chapter we will see that despite advanced medical technologies several studies show that diagnostic accuracy is no better today than it was a hundred years ago . . . about fifty per cent.

These studies, as well as my experience, strongly support a contention that I have held for many years. It is imperative that each of us take control of our own health. Medical knowledge abounds, readily accessible to everyone. Make use of it. We might not understand everything we read or hear concerning our health or a given medical condition, but as we have seen, and I will further prove, likely neither does your physician. With interest and a little effort we can learn enough to ask the right questions, to be aware of obvious ignorance and to take charge of our own health.

It is imperative that we do not simply place our health and our lives in the hands of a physician without first learning all we can about health and our particular illness. Seek the physician's advice? If you feel you must. (In all fairness, allopathy has developed a number of procedures for certain extraordinary conditions that have great value.) Get a second or third opinion? Insist upon it once you have decided to seek the first. Trust any of them implicitly? Absolutely not!

We are about to discover that medicine functions on several levels. Some physicians with a natural mechanical ability have a certain intuitive flair and for them medicine is an art. Few, very few,

approach medicine like a science. These practitioners make diagnoses only after meticulous processes of elimination and they only prescribe therapies for which there is solid evidence. However, most physicians practice medicine like a religion. Having no intuitive ability for the art and very little understanding of its scientific aspect they diagnose and treat each condition according to tradition—a tradition frequently disturbed, modified by scientific discovery. Thus, it is not without reason that Stuart Berger, MD, warned, “Caution: Doctors May Be Hazardous to Your Health.”¹

Part One,
Priority # 1,
A Healthy Bottom Line

Chapter One

Medicine is Big Business

The failure to provide quality healthcare to the American public is neither an issue of available clinical resources nor adequate funds for these resources. That the medical profession fails to provide quality healthcare even to the wealthiest individuals who patronize the country's most high-tech facilities illustrates the veracity of this statement. The failure to provide quality healthcare to the American public is the requisite outcome of the absolutely inadequate education and biased, myopic philosophy of allopathic medical practitioners (aka, Medical Doctors).

Allopathic practitioners cannot provide quality healthcare because they do not understand or practice quality healthcare. What they can provide (although few have the expertise) is quality disease exploration; and this they do with great fervor. Whether they are

proficient hunters or not makes no difference; all medical doctors take part in the quest. Whether a hunt is indicated or not makes no difference; it is their duty. But this lucrative disease hunt is not the promotion of health or the practice of healthcare. Indeed, its prominence is specifically due to the lack of quality healthcare. At best, it is the flip side of the issue, the negative aspect of the positive and it has developed a life all its own.

It is only under the wings of the lucrative post Civil War pharmaceutical industry that allopathic medicine has managed to dominate our current medical system. And this was achieved by legislation rather than accomplished clinical outcome. Sadly this system, which is designed for and thrives upon its own continued failure, succeeds masterfully.

Something is Wrong With This Picture?

I started my career in healthcare about thirty years ago. Early on, I knew something was wrong; and although I was pretty sure of what that something was, as a young respiratory therapist I was too naïve, too trusting of the system to seriously consider exposing it or what I soon perceived to be its source. I quickly learned that this problem was an internal matter not to be discussed outside the sacred halls of the institution and certainly not to be discussed with anyone outside of healthcare.

From the beginning I worked with many seasoned physicians who could not read electrocardiograms, decipher x-rays, correctly interpret or make appropriate use of even basic laboratory results.

I soon realized that although medical doctors were the alleged experts, the teachers of medicine, many of them knew less than I did about certain rudimentary body systems, their diseases and the accepted treatments for each. Some didn't even know how to use the stethoscope correctly.

Stethoscopes (at least quality stethoscopes) are anatomically designed to fit the forward angle of the external auditory canal. If placed backwards the stethoscope's ear pieces are at opposing angles to the auditory canals, thereby making it most difficult, if not impossible, to hear. I recall a certain physician, a house resident, called upon to assess a possible abdominal aortic aneurysm—a very serious, potentially lethal condition in which the artery could burst open and the patient bleed to death within minutes. The physician arrived with a stethoscope that looked like a toy, with which he had trouble hearing the telltale throbbing in the patient's abdomen. When I handed my nice, professional style stethoscope to him, he looked at it carefully, examined the angle of the ear pieces (at least knowing there was a correct and an incorrect position) and proceeded to place it in his ears backwards. He listened, or attempted to listen, to the patient's abdomen. He moved the stethoscope about until finally making a funny face he stood erect and sharply removed the stethoscope from his ears. For a second time he examined the angle of the ear pieces then preceded again to place them into his ears backwards; but this time with confidence as he pronounced there was no evidence of an aneurysm.

I am thinking also of another physician with whom I worked for a few years—a board certified internal medicine specialist who did not fully comprehend that renal failure leads to metabolic acidosis. Now, I am sure that anyone reading this with even the slightest understanding of medicine or basic physiology is thinking that I must be making this up. If I had not personally discussed this with this physician I am not sure that I could have believed such ignorance was possible.

For readers without a basic understanding in physiology this ignorance may not sound too alarming, so let me put it in perspective. Acid/base balance is a fundamental concept in human biochemistry. Normal metabolic cellular function produces waste continuously in

the form of hydrogen ions which combine with water to form acid. The body deals with this excess acid in different ways. It buffers some of the acid with various biochemicals; it breaks down some of the acid and expels the by-product as carbon dioxide from the lungs; and ultimately it excretes the excess hydrogen ions, the source of the acid, through the kidneys.

If the kidneys fail to function properly excess hydrogen ions and therefore acids accumulate resulting in a condition called metabolic acidosis. Depending upon the severity of the metabolic acidosis it can cause many problems, not the least of which is death. This is as basic to understanding bodily function as understanding the normal structure of a simple declarative sentence is to the English language. Can you imagine having an English teacher who did not understand the concept of subject, verb, object? Yet, this physician honestly did not fully comprehend that renal failure resulted in metabolic acidosis.

Although years later I came to realize just how such ignorance was possible at the time I could not understand how he had ever passed a licensing exam, much less how he had actually graduated from medical school. And I shuddered to think there were others like him.

Beyond the widespread abject ignorance I also noticed how many physicians would readily send patients for dangerous and expensive procedures without even considering logical alternatives. I remember a grossly overweight female in her mid twenties with mild chest pain on whom we performed a rigorous cardiac stress test. It showed nothing significant. However, rather than discuss diet change, weight loss and exercise with this young woman, the physician dutifully opted for heroic intervention. I was still in the room as he, an internal medicine specialist, told her he wanted to schedule her for cardiac catheterization and an evaluation for coronary artery bypass graft surgery.

I remember many of these unwarranted and extreme treatments.

Another involving the popular Cath Lab—by yet another physician, this one a cardiologist—dealt with a frail, elderly woman in her late 80s suffering end stage terminal lung disease and thus not a viable candidate for any follow-up procedures regardless of the test results. But because such logic does not concern heroic intervention she too was strolled through the sacred halls to undergo a completely unnecessary and extremely dangerous exploratory procedure from which, I vividly remember, she did not survive. It is not without reason that some have nicknamed the Cath Lab, the Death Lab.

I remember another elderly gentleman whom I saw immediately post-op from a coronary artery bypass graph. It was my job to operate the mechanical ventilator during recovery. He was in his late 70s, with a history of two prior coronary artery bypass graph surgeries. He was also a diabetic and a victim of chronic renal failure with frequent visits from the dialysis team. Even if he would have survived, other than the amazingly preauthorized insurance coverage, he was hardly a viable candidate for a coronary artery bypass graph.

Routinely, I saw people linger day after day on mechanical ventilation long after they were physically able to breathe on their own. But because the physician (often a pulmonologist—a supposed experts in this area) either did not fully understand the process or perhaps simply desired the daily consultation fee, he/she would not allow the patient's removal from the machine. During these needlessly prolonged ordeals many patients eventually developed ventilator-acquired pneumonia, from which a significant number ultimately died. To this day ventilator-acquired pneumonia remains a major problem with mechanical ventilation.

At Last I Understood

Almost daily I questioned the necessity of the endless tests and inappropriate treatments, but generally it was all to no avail. I was a mere pickaxe striking at the Rock of Gibraltar. At first I had assumed

these incompetent physicians had simply slipped through the cracks. I assumed they were the exception, the bottom of the bell curve. But the incompetence was so prevalent that in time I began to question the entire institution of the medical education. Could it be that it was simply inadequate?

When finally I fell ill myself and the recommended treatment did not work, I turned to alternative therapies. They did work; and thus began a new chapter in my healthcare experience. Heretofore I had learned that the philosophy of holistic healthcare was nothing but quackery and, like any well-trained institutionalized learner, I believed it. But now that it was my health on the line suddenly the philosophical became practical and the known failure of western, allopathic medicine became a personal reality. To my great surprise, behind this door of holistic healthcare I discovered other allopathic has-beens, including many allopathic physicians, who had come to the same realization. While some still struggled with their roots trying to combine the heretofore heresy of holistic healthcare with their allopathic philosophy, others had published books expressly denouncing their profession's ignorance.

My new horizons culminated in the formal study of naturopathic medicine, which I pursued primarily to better understand my own health. But it was during my previous studies in business that I came to fully understand why so many physicians were so incompetent, why the system allowed it to continue, and why so much of western medicine is a failure.

Decades earlier I had realized that beyond the obvious ignorance, many medical procedures were performed merely for the profits they generated. Both the institution providing the procedure and the physician interpreting the procedure results receive generous reimbursements. But what I had not realized was that the entire western medical economy with its many and various industries, relied almost exclusively upon the excessive use of these mostly

unnecessary procedures, as it equally relied upon its continued failure to cure the diseases it purported to treat. This was the answer to some very troubling questions: Why is the medical education so inept? Why is rampant incompetence allowed to continue? Why are superfluous, expensive and useless tests and treatments routinely ordered? I came to realize that each question was answered by one simple word: economics. Medicine is big business. Modern western medicine is a system designed for failure and its success is masterful. I learned that truly “A Cure Is Not Welcome.”

Healthcare is a Vast, Complex World

The world of modern medicine is complex. I am not referring to clinical medicine so much—which is actually quite mechanical and algorithmic in nature, but to the world of the business of medicine. The medical industry is much larger than most might imagine and the business end of this industry has many roles on several different levels.

In the world of medicine, clinical medicine has a primary role to be sure. Certainly it is the most visible. But it is merely a fraction of the many industries that comprise the vast complex healthcare system. The relationship between clinical medicine and the business of medicine is a strange one. Clinical medicine has all the prestige and takes all the credit, while the business of medicine has all the power and takes most of the blame. As such, clinical medicine is necessarily influenced, often even controlled, by the business of medicine. To fully appreciate any aspect of the modern healthcare system background knowledge in the business of medicine is required.

Behind the curtains of every front-line healthcare institution in every large and little town in America are many players other than the clinical staff: engineers and maintenance crews, medical records personnel, housekeepers, coding and billing agents, CPAs, food

services workers, security personnel, administrators and a host of middle managers, a human resources staff and others. Even a small hospital of less than 200 beds can easily employ well over 1,000 people, not even including the medical staff. Beyond this, entire industries exist solely to support the center stage performance of front-line clinical healthcare. Or more accurately—and the topic of this chapter—much of the center stage performance of clinical healthcare takes place merely to support the peripheral industries.

The number of peripheral healthcare industries is enormous. So too are their profits, many far exceeding the profits of clinical medicine with some wielding considerable political clout on Capitol Hill. Beyond the profits and political clout they employ multitudes. There are medical equipment and drug manufacturers—each having clinical technicians, marketing departments, salesmen, research and development branches, security, housekeeping and maintenance personnel, administrators, secretaries and middle managers, lawyers and boards of directors. There are middle marketing companies that sell medical equipment and others that simply rent it. They too have technicians, salesmen, clerical and administrative personnel, lawyers and boards of directors.

There are consulting firms for clinical, administrative and regulatory roles—each with their professional consultants, marketing staffs, clerical and administrative personnel, lawyers and boards of directors. Then there are institutions of higher learning. They have professors, researchers, marketing departments, clerical and administrative personnel, lawyers and boards of directors, maintenance, housekeeping, security and food service personnel. And we must include the insurance agencies. They too have their share of clinical consultants, marketing departments, salesmen, clerical and administrative personnel, investigators, lawyers and boards of directors.

But that is not all. There are many organizations specifically

designed to address particular medical conditions: the American Heart Association, the American Lung Association, the National Cancer Society, the Red Cross, the National Heart, Lung and Blood Institute, ad infinitum. All of them have clinical personnel, clerical and administrative personnel, lawyers and a board of directors.

Then there are the national, state and private professional associations that service the various members within each of these many health related professions. There are organizations for educators, administrators, insurance agents, nurses, dieticians, medical device engineers, financial personnel, physicians and physician assistants, managers, laboratory personnel, therapists of various kinds, record keepers, radiation personnel, regulatory officers, again ad infinitum. Each of these organizations has a technical staff, marketing staff, clerical and administrative personnel, lawyers, and a board of directors.

But this too is not the end. There are publishing companies with clinical and technical consultants, marketing departments, salesmen, editors, clerical and administrative personnel, lawyers, and yes, boards of directors. And there are private regulatory bodies such as JCAHO, CAP, CARF, CHAP and others that oversee, accredit, license or otherwise ostensibly legitimize numerous institutions. Each has technical consultants, marketing departments, field investigators, clerical and administrative personnel, lawyers and a board of directors.

There are federal governing agencies as well, such as the FDA, HCFA (now CMS), OIG and OSHA. Each of these agencies has a tremendous number of employees: technical consultants, field investigators, clerical and administrative personnel, middle managers, maintenance and security staffs, and lawyers. Then each state has its own similar regulatory bodies employing another tremendous number of personnel. And there are organizations of national authority such as the NIH, HHS and the CDC. Each of these employs a significant

number of technical consultants, researchers, field investigators, clerical and administrative personnel, middle managers, maintenance and security staffs, and a board of directors.

There are more still. There are contract companies that provide continuing education to the many specific professions: from technicians to physicians and administrators, and from performance improvement personnel to insurance agents and the many disciplines in between. Each of these companies has educators, a marketing staff, clerical and administrative personnel, lawyers and a board of directors. There are companies that supply animals for research. Others that provide billing services and others still that transcribe medical records. And there are companies that recycle medical devices and others that dispose of medical waste. These also constitute a sizable work force.

Finally, although we have certainly not exhausted the list, there are the labor unions that represent a considerable portion of all these workers.

White Collar Corruption

Medicine is big business and although very little of it is clinical in nature the clinical aspect is the fulcrum with major health and economic consequences for every medical consumer. Business medicine sets the tone. It determines current and future practice and decides what procedures are utilized. But clinical medicine is the point of contact through which business medicine and the peripheral industries access the patient. Therefore, not only is clinical medicine center stage for the patient—who has been coerced and convinced of its necessity—it is the focus of the entire healthcare industry.

Much of medicine is nothing more than white-collar crime, an elaborate side-show designed to relieve you of your money. The continued financial success of the modern healthcare industry is directly related to the continued failure of the clinical practitioners.

For this reason clinical medicine is rife with corruption. Of the three proverbial motives for corruption, medicine has intimate knowledge of two. The lust for power and money are helplessly woven into the fabric of its many costumes and donned by a variety of thespians.

Chapter Two

The Days of Yore

Most of us hold a romantic view of medicine. We think of its rich history, the great humanitarians like Hippocrates, St. Benedict, David Livingstone, Thomas Dooley, Clara Barton, Florence Nightingale and Mother Teresa. Or we think of great achievers like William Harvey, Richard Lower, Robert Boyle, Oliver Wendell Holmes, Joseph Lister or Walter Reed. Those with a few years under your belt still remember the unpretentious country doctor, the house calls and the ever-present black bag never far from his side. Always the gentleman, always the patient's advocate, this physician would attend all day or night at bedside if necessary. The pay was low—sometimes little more than a chicken or a few jars of pickles, but this was of little concern. These were humanitarians, philanthropists on a sacred mission to treat disease and ease suffering.

In today's world this image is but a distant memory, an armchair story lingering from the days of yore. Today's medicine has a brooding dark side. Today's medicine is controlled by business; it is a very competitive, money-driven industry, largely controlled by the pharmaceutical companies and practiced by a variety of self-serving individuals, some less than scrupulous. Medicine is no longer the noble, philanthropic discipline we remember.

Those were the Days

Not that humanitarians or philanthropists no longer exist, but they are no longer the norm. In a 1998 commentary, Richard Bates, MD,² author and retired internist reflected on the changes in medical practice over the last several decades by taking us back some seventy-five years to the days of yore.

In those days the economics of medicine was as simple as the care. The doctor who delivered me in my parent's bedroom rendered all prenatal, postnatal, and well-baby care, and was promptly paid in cash as the bills were tendered.

When the 1929 boom bombed, doctor's bills were placed low in the monthly stack of unmet obligations. Generally one paid cash or went without shoes and groceries, but doctors were caught by the moral obligation to render care first and seek payment later. But since many of them lived over or beside their offices and had only one employee, or none, overhead was low enough that they could render a lot of free care.

Show Me the Money

Those days are long gone. Doctor's bills "placed low in the

monthly stack of unmet obligations” are now promptly turned over to a collection agency. As for the “moral obligation to render care,” the first question patients are asked when entering a doctor’s office today is how they plan to pay for the service. If the answer is not satisfactory, the patient will likely be looking elsewhere for medical care. The cottage industry type practice of “living over or beside” the office and having “one employee or none” has been replaced with a receptionist, a crew of medical assistants, a nursing staff, lab and x-ray personnel, someone to code and send out the bills, an accountant, an office manager, a half million dollar mansion in a country club and a summer or winter cottage according to personal preference. Oh yes, and a BMW to get back and forth. Dr. Bates continues his commentary.³

So here we are, 75 years down the road. More than half of all doctors who provide patient care are salary: fewer and fewer practice solo. Because they have partners, many doctors now expect guaranteed time off, trading nights and weekends, so that a new mother cannot be sure of delivery by her usual obstetrician. The sacred doctor-patient relationship has gone the way of the neighborhood grocer and corner pharmacist.

.....

On the up side, incomes are tremendous. A few doctors are making as much as \$1 million a year. Most have regular hours, paid vacations, and guaranteed free time to parent and recreate.

Thus an ever-increasing number of aspiring fortune seekers have entered the field of medicine. To pursue such a prosperous lifestyle this new breed of physician seems more concerned with securing a comfortable retirement than attending to their patient’s health. Rather than renaissance men and women who travel the road of life-long

learning, mastering their craft as well as others, they are content merely to follow the money. Thus, Dr. Bates has keyed in on this motivation. Having described where medicine has been and where it is, he predicts its future. “Medicine as a business will flourish: as a science and a profession it will continue to lose an alarming amount of weight.”⁴

Dr. Emanuel Cheraskin, Professor Emeritus at the University of Alabama Medical School seems to agree with this assessment, making the charge that what we call healthcare is really disease care. This type of medicine, he said, is “the fastest-growing failing business.” That is, although it fails to provide true healthcare, it makes a lot of money doing it.⁵

No Time to Doctor

While providing true healthcare takes time and genuine medical knowledge, treating a disease or as is the vogue treating the medical chart is accomplished quickly by mechanical examination and rote response. Joseph Jerger, MD, comments on this new style of medicine.⁶

In my early years as a physician, a patient with an abdominal complaint was examined for signs of everything from syphilis to bad teeth. These possibilities were eliminated one by one by my eyes, ears, fingers, and what simple laboratory tests were at my disposal, until the real cause was located. Now we take a history, turn the patient over to a machine, and the machine does the rest.

A computer program might better direct modern medicine. Dr. Atkins has commented on such mechanical, rote medicine. “Blood pressure too high? Lower it. Have diarrhea? Stop it. Runny nose? Dry it up. Headache? Kill the pain. Vomiting? Take an anti-emetic. Skin rash? Suppress it.”⁷ For each, there is a clinical pathway that

requires little more than Boolean Logic. Problem solving and synthetic analysis are unnecessary skills. Algorithmic flow charts simply follow laboratory tests that dictate action. To do otherwise, to assess for related symptoms and to probe for and address the underlying root cause takes time . . . too much time. And it takes skills beyond the rote memory mastered in medical school. But Dr. Jerger has warned, “machines will never supplant the interpretive ability of a trained mind. . . . The profession will eventually pay dearly for the disregard of the five senses in favor of its reliance upon devices.”⁸

That medicine is no longer a philanthropic mission—as betrayed by this assembly line technique—is aptly illustrated in a 1999 survey published in the *Journal of the American Medical Association* (JAMA). After reviewing 1,000 audio taped physician-patient discussions concerning treatment options, it was concluded that “only 9% of the clinical decisions could be defined as truly informed decision making.”⁹ Translated, this means that in their haste physicians did not take the time to adequately inform their patients so they could make truly informed consent about their own treatment.

Seemingly in an effort to protect the reputation of his colleagues and perhaps to justify their less than humanitarian behavior, the author assured the readers that “Most physicians would accept the importance of informed consent to patient management as something more than just a medical-legal necessity. . . .” But then he also admits that “physician time will be a major impediment, and new strategies, including more effective and efficient use of educational materials and decision aids in office practice, will need to be developed . . . as part of the solution.”¹⁰ In other words, yes, in principle physicians believe patients should be able to make informed decisions about their care, but physicians are too busy cranking patients through the system (i.e. making money) to take the time necessary to actually discuss health and treatment options with their

patients.

This lack of informed patient consent, solely the result of inadequate information from the physician to the patient, is apparently a standard part of cancer treatment. According to the American Society of Clinical Oncology, cancer patients and their physicians agree on the goal of chemotherapy less than half the time.

A research team from the University of Wisconsin Medical School determined that although patients appreciated the risks involved in chemotherapy they did not have a clear understanding of its benefits or of possible alternatives to the chemotherapy. Some 65% of the patients believed that chemotherapy was a cure, while their physicians consider it merely palliative. Even when both agreed on the goal of therapy the patients still had a much higher expectation of success than did their physicians (82% vs. 59%). In spite of this obvious ignorance on the patient's part, 91% of the patients and 84% of the physicians "were satisfied with the patient's understanding of the burdens and benefits of chemotherapy."¹¹

These pitiful findings clearly reflect the learned mind-set that permeates every doctors thinking: "Trust me, I'm the doctor and I know what is best for you." And, considering the extremely poor risks to benefit ratio of chemotherapy, I believe this borders on criminal activity. Certainly it is ethically reprehensible. That a physician would treat a cancer patient with largely ineffective yet extremely toxic, even deadly substances, without giving the patient all the information needed to make an informed consent is unconscionable. It is especially condemning when you consider that highly effective, inexpensive and non-toxic alternative options exist in the form of detoxification, nutrition and nutritional supplements.^{12,13,14,15,16} Granted the allopathic physician is not an advocate of those alternative therapies that threaten his or her livelihood, but it is the patient's life at stake and the patient has a right to have all the information available to make an informed

decision as to his or her care.

This same dearth of information is noticed among diabetic patients. Although heart disease is the leading complication and cause of death among diabetics, according to a survey released on May 21, 2001 by the American Heart Association, only one-third of diabetics realize that heart disease is among the most serious complications for which they are at risk. The study surveyed 532, Type 2, diabetics and found that despite their increased risk for heart disease the majority of patients were not taking even the most basic precautions and there was widespread ignorance even regarding their own insulin resistance.¹⁷ Considering that doctor means teacher, it is appalling that those teachers of medicine who treated those 532 patients were too busy cranking clients through the system to take the necessary time to doctor their patients.

Where are the Humanitarians?

While any doctor who is a true humanitarian would take the necessary time to educate each patient, most physicians simply do not—even when the stakes are very high and their patient is at great risk. I once served on a hospital committee commissioned with the task of implementing a process to assure that parents of pediatric asthmatics received the education necessary to deal with their child's illness. The mortality rate for pediatric asthmatics has literally doubled over the last decade making this a most important medical alert.¹⁸ While meeting with the chair of the pediatric physician's committee, I asked if the physicians could take time during routine office visits to explain this information to their parents. The physician's response was quite frank; "Nurses and therapists at the hospital will have to provide this education once the patients are admitted. The physicians simply will not take the time to educate them in their office. They do not get paid for it."

What, one might ask, do the physicians get paid for if not to be

educators of health? Although the answer will be dealt with in more detail later, for now suffice it to know that they are paid to perform procedures and, in a round about way, to write scripts for prescription drugs.

Even beyond the materialistic “time is money” philosophy, to truly understand the ethical implications of the physician’s conscious decision to ignore the education of these asthmatic patients, one must realize that when these pediatric patients are finally admitted to the hospital they are acutely ill, arriving via the emergency department and often at deaths door. If their physicians had cared enough to educate them during their routine office visits most of these emergency department visits, including those who do not survive for admission, could be avoided. True, those who survive can be educated about their disease while hospitalized; although it will likely fall on deaf ears for many seem to have the view that since it did not come directly from their physician it cannot be that important.

Where is Nobility?

Do noble, quality practitioners exist? Certainly! But they are becoming hard to find. Some are drummed out by their governing bodies—stripped of their license to practice for refusing to prostitute themselves and for daring to educate their patients about nutrition and alternative therapies to synthetic pharmaceuticals, which is a clear violation of allopathic philosophy of heroic intervention.^{19,20} Many others have simply left the profession out of frustration.

But too many physicians who may have begun with noble intentions eventually succumb to fraternal pressure and/or the temptation to amass a fortune. The initial indoctrination in medical school, the collegiate hazing of internship, the constant peer pressure for conformity and alas the hefty ransom—collected at will for the mere scribbling of a signature every sixteen minutes²¹—can be quite overwhelming, even for those without a clandestine agenda.

Chapter Three

Inept Education

Practiced by many, practiced well by a few, mastered by even fewer, medicine is an ever-changing, never-changing philosophy dogmatically devoted to its myopic tradition of heroic intervention, yet relentlessly confronted with and mystically bedazzled by discovery. The result is a confused society of physicians held captive to a perpetual dichotomy—one foot rooted in absolute truth, the other stepping into the future where discoveries displace past truths and new therapies betray tradition.

Although the forward ground is increasingly firmer, it is hard to leave the familiar; and although outcome and discovery continually disprove current practice, the goal of allopathy remains constant: heroic intervention is, by necessity, more important than health or

cure. Intervention is the hallmark of allopathy; this, its tradition, yields credibility regardless of the outcome. If the patient does not get better it is because the illness is beyond medical technology, but at least the physician intervened in every way possible. If the patient does get better it is only because of the physician's skill and intervention.

Tradition is Safe for the Insecure

Beyond the perceived credibility conjured up by the tradition of intervention, the flip side of this tireless adherence to a proven faulty tradition is personal insecurity. Some are a little sharper than others, but one thing they all have in common (and openly discussed in medical publications) is a lousy education. The physician's absurdly inept academic education results in a community of undereducated, ill-prepared practitioners indoctrinated by a fraternal order and threatened by change. But this fundamentally inferior education does not go unnoticed by the physicians themselves, among whom a very real and understandable sense of insecurity is endemic. Unleashed upon society, having little understanding and even less confidence in their own abilities, for them, there is safety in tradition. Insecurity in all forms finds comfort in tradition.

Of course the medical journals refrain from actually addressing the institution of medical education, focusing instead upon the multitude of incompetent medical practitioners. And of course they never mention that these incompetent practitioners come from the same medical programs as the supposedly competent practitioners. Nor do their solutions ever include the restructuring of the education format that graduates such ineptness. For regardless of the medical school, whether prestigious or obscure, the pitiful medical program is virtually the same. Although a prominent AMA spokesman recently admitted that today's medicine is increasingly complex with more

intricate procedures and therapies that create an inherent potential for error,²² still medical college lasts no longer today than it did a century ago, even before surgeons realized they should wash their hands before an operation. Thus, because of their education all physicians must be considered incompetent until proven otherwise, which I submit seldom happens.

A Typical Medical Education

Physicians may speak of twelve and even twenty years of education, but the truth of the matter is that medical school is a mere four years—some are only three; and in both the academic portion is limited to the first two years. And while most medical students have an undergraduate degree, even this is not requisite in many medical colleges. Only eight of the one hundred and twenty-five medical colleges require a thesis, and a master's degree is not a requirement for any. Although many medical schools do expect at least three years of undergraduate work, admission requirements for many others simply consists of five or six prerequisite classes and an undetermined competitive grade on the Medical College Admissions Test (MCAT).

The following examples were chosen for no particular reason; absolutely all of the other medical colleges in America and Canada have comparable programs—they must, to comply with the licensing body. Although some do have slightly higher admission standards all have the meager two years of academic medical education followed by either one or two years of clinical clerkships.

Meharry Medical College is a prime example of the entry standards of many four-year medical schools. At Meharry, prospective students must have completed four science courses with labs, one English class and have achieved a minimal GPA of C;

hardly doctorate material or even a good candidate for a master's degree.

The academic or classroom education in both the three and four-year medical schools is virtually complete after the second year. The third and fourth years merely consist of a series of mostly six-week clerkships during which medical students job-shadow practicing physicians in various specialties. During these years of "higher education" little more is accomplished than for students to get a feel for the various medical disciplines to decide which specialty they might want to pursue.

The Medical College of Georgia, a three-year program, is a good example. Here, there is no required minimum GPA and no required score on the MCAT. Although a baccalaureate degree is preferred, it too is not required. Again, even those who would not qualify for many masters program can be admitted to medical school.

Seemingly, as if this is not easy enough, the medical society has decided to make it even easier to become a physician. To date at least thirty medical schools, including some of our most prestigious schools such as Tufts University, Boston University and Robert Wood Johnson Medical School offer accelerated programs in which they grant a BS/MD combo. At Ohio Universities School of Medicine, yet another school offering this program, a mere high school graduate enters the program and emerges with a medical doctorate in six short years. Keep in mind that this also includes the job shadowing . . . I mean clerkships. In all, this equals two years of undergraduate work, two years of academic medical school and two years of job shadowing.

The Credentials Are Meant to Fool You

Do not be fooled by the credentials. Despite the fact that not one

of these graduates has mastered medicine and much less could be considered a teacher of the subject—which is what doctor means—upon graduation from these three or four year programs the degree Doctor of Medicine (MD) is granted and they become legally, licensed medical practitioners.

These licensed physicians then spend the next year working very long hours with little sleep and even less supervision. Any supervision they do get is likely to come from a resident (a mere senior fellow who has recently completed his/her year of similar servitude), rather than a seasoned Professor of Medicine. This, their internship, is little more than a fraternal hazing ritual at the expense of unwitting human guinea pigs. Again, Stuart Berger, MD, tells us of his experience.

I soon found myself beginning my internship, the brutal rite of passage that tempers all physicians. Every doctor knows the terrified feeling of showing up on the wards the first day, knowing he or she is expected to help people, but not having the first clue as to how. I had never taken a pulse, inserted a catheter, sutured a wound, drawn a blood sample, even taken an accurate history. Neither I nor my classmates knew even the rudimentary skills of doctoring. We were expected to learn as we went, on the run, using our patients as human workbooks. In theory, older doctors were there to guide us; in the grim practice of the wards, we were on our own, left to fend and figure as best we could.²³

From the internship these already licensed physicians progress to residency. For the next few years, they too will supervise those less experienced than themselves. Perhaps they will even get the opportunity to work closely with more experienced physicians, real

pros with five or six full years of practice under their belts. Our culture has a term for this type of education. It is common to many industries. We call it on-the-job-training or OJT. Employees are paid a salary while they learn their craft by trial and error under some degree of supervision. However, no industry but medicine makes the pretense that their OJT is an academic education. Dr. Berger speaks more of his OJT.

Through those endless days and nights of our training process, we knew something was wrong—but we never had time to ask what. We were so concerned about packing in all the information we were given; mastering the overwhelming rush of data and facts, knowing how to put the pieces together, that it never occurred to us that there might be things we were neglecting altogether.²⁴

Earlier, he had commented,

In the excitement and rush, we had little time to stop and reflect or to ask the obvious questions: We were learning immense amounts—but were we learning what we should? We were becoming doctors, to be sure, but were we becoming better healers?²⁵

An Academic Shame

The medical doctorate is a shame, an embarrassment to academia; no master's degree, perhaps a bachelor's degree, a mere two years of postgraduate academic education which largely is not even graded beyond the pass/fail system, another one or two years of job shadowing and presto, the degree Doctor of Medicine is granted. This hardly compares to the academic requirements for other

doctorates.

Consider the requirements for a Doctor of Theology (ThD). Upon completing a requisite bachelor's degree, students must complete a full four-year Master of Theology degree (ThM), which generally requires a GPA of 3.5 for admission and a dissertation for graduation. Then only if the grades are high enough (again, a GPA of 3.5) is the candidate granted admission to the ThD program, which is another four years of grueling academics and another dissertation.

Once considered the ultimate education, today the ThD lives in near obscurity receiving little acclaim from a society that has been converted to the religion of allopathy. Nevertheless, anyone wanting to achieve this degree must still complete the rigorous academic requirements; and rightly so. Doctors of Theology deal with philosophical ideas that ultimately affect the whole of society. They should be well educated. But then so too should the medical practitioners. They too have a significant impact upon society? I submit that the academic standards for achieving the MD should be no less than those required for the ThD. Academia should demand it. Society should expect it.

A Profitable Franchise

Although some medical doctors will truly master their craft it is not required or even expected. Too many are content simply to build a busy but comfortable and lucrative practice dispensing meaningless prescriptions, ordering useless test and resting on the laurels of their supposed superior education.

For too many physicians, the medical license is little more than the key to a profitable franchise—a mere license to write drug prescriptions. And, like so many other regulatory licenses, it is a license retained merely by paying the price. Know how has little to

nothing to do with it. Once a physician receives a medical license—barring a series of major screw-ups—he or she is set for life. Despite the ever-changing nature of medicine, there are no re-certification exams and less than half of the states even require physicians to complete continuing education credits to keep their license current.²⁶ Inlander et al agrees.

What a medical license gives a doctor is what a Senate confirmation gives a Supreme Court justice nominee: a practically unassailable job for life. There is a difference, though. The Supreme Court justice has had to go to law school, pass a bar exam, get a job, do well enough at it, attain a position of high standing—a judgeship, say, or a place in academia—do well enough at it, and catch the eye of a person in a lofty government office. It's a long haul. One usually gets a Supreme Court job for life only after one has paid his dues.

On the other hand, a physician has merely to get through four years of medical school, pass one licensing exam (with an average passing score of as low as 75 out of 100, and in some states with an even lower score), successfully complete an internship somewhere, and 'possess acceptable personal attributes,' whatever that means. And that's it. Minimal qualifications. Job for life. The only dues a doctor has to pay are the annual kind for license renewal—if he happens to be practicing in a state that even requires an annual fee. Some don't. Simply being alive and having once passed a licensing exam is all that's needed to have *carte blanche* in the field of medicine. . . . it is only in rare instances that proficiency or experience are prerequisites for getting a

license, or competent or successful work conditions for keeping one. Short of killing someone (or, more likely, a string of someones), once a doctor always a doctor.²⁷

Medical College Curricula

To further illustrate the issue of the minimal education our nation's physicians receive, the following pages outline of the typical academic curricula for three and four year medical colleges. Note that a Masters degree is not requisite for any of these programs and students actually enter the six-year programs directly out of high school. In essences, all of the medical colleges follow the similar curricula. The primary difference between well known research medical institutions/colleges verses lesser known medical schools is the cost not the extent of the education. Another occasional, difference could be the admission requirements, with some of the more popular schools having more competitive qualifications. But all, including the Ivy League schools, follow the same pitiful curriculum. I am sure some readers will doubt the veracity of these minimal qualifications (a response itself that further illustrates the way we have been deceived into believing the MD is of a superior intellect and education), but I invite all with interest to simply log on to the website for the Association of American Medical Colleges at <http://www.aamc.org/start.htm> where this information for each medical school is easily accessed.

Typical Three Year MD²⁸

Academic requirements for admission to the Medical College of Georgia are:

- No required minimum grade point average.
- No required minimum score on the Medical College Admission Test.
- Preference is given to applicants with baccalaureate degree, but not required.
- Minimum requirement of 90 semester hours.

First Year Curriculum

Academics, human anatomy, histology and development, biochemistry and genetics, neuroscience, physiology, psychiatry, and fundamentals of healthcare. Contact with patients begins in the first year in the fundamentals of healthcare courses.

Second Year Curriculum

Academics, the pathophysiologic basis of clinical medicine with courses in pathology, pharmacology, clinical microbiology, reproductive endocrinology, physical diagnosis, foundations of clinical medicine and principles of patient care.

Third Year Clerkships

Six months of generalist clerkships, consisting of twelve weeks of internal medicine, six weeks of pediatrics and six weeks of family medicine. In addition, all students participate in a six-week obstetrics/gynecology clerkship, an eight-week surgery clerkship, a six-week psychiatry clerkship and a four-week neuroscience clerkship.

Typical Four Year MD²⁹

Academic requirements for admission to the Meharry Medical College School of Medicine are:

- A high school diploma.
- At least three years of college credit: including General Biology or Zoology, Inorganic chemistry, Organic Chemistry, General Physics, each with labs, and English Composition.
- A minimal GPA requirement of “Satisfactory Completion,” which they interpret as an average grade of at least “C.”

Phase I:

Academic Education, First and Second Years Curriculum

- Generally referred to as the basic sciences years. The sequencing of course content and the Introduction of Clinical Medicine in the first year, coupled with correlated and integrated instruction early on in the second year, provide students with a basic, systematic pre-clinical curriculum. The basic biomedical sciences and the behavioral sciences are designed to provide a general primary care education. Daily class schedules are arranged to foster effective teaching and learning.

Phase II:

Third and Forth Year Curriculum Clinical Clerkship

- Generally referred to as the clinical years. The clinical clerkships begin in the junior year. Students are randomly assigned to the seven clinical rotations-internal medicine, obstetrics and gynecology, pediatrics, surgery, psychiatry,

family medicine, and occupational/preventive medicine.

Another Typical Four Year School³⁰

- A minimum of 90 semester hours, including chemistry, physics, biology, psychology and math.
- A grade point average of 3.0.
- Preference is given to students who have completed an undergraduate degree, but it is not a requirement.

Curriculum

Year 1: 40 weeks; 28 Academic hours per week

Block I: Functional Biology of Cells and Tissues; Interviewing and Doctor/Patient Relationship

Block II: Biology of Organ Systems I; The Physical Examination

Block III: Biology of Organ Systems II; Human Life Cycle I

Block IV: Biology of the Nervous System; Human Life Cycle II

Year 2: 40 Weeks; 28 Academic hours per week

Block V: Introduction to Pathobiology; Evidence-based Medicine

Block VI: Pathobiology I; The Doctor and Society

Block VII: Pathobiology II; Prevention and Clinical Skills

Block VIII: Pathobiology III; Psychopathology and Substance Abuse

Years 3 & 4: 82 weeks of Clerkships (8 weeks each)

Family Medicine, Medicine, Pediatrics, Psychiatry, Obstetrics and Gynecology, Surgery.

Yet Another Typical Four Year School³¹

This school, which does require a baccalaureate degree for admission, is another prime example of a typical four-year medical curriculum.

Year 1: 7 Required Academic Courses

Basic Life Support, Behavioral Science, Human Structure & Development, Cell and Molecular, Biology, Integrative Pathophysiology I, Neuroscience, & Physician, Patient & Society

Year 2: 5 Required Academic Courses

Immunity and Infection, Advanced Cardiac Life Support, Integrative Pathophysiology II, Organ Systems, Physician, Patient and Society 2

Year 3: 6 Required Courses (Clinical Clerkships)

Family Medicine (6 weeks), Internal Medicine (12 weeks), Obstetrics & Gynecology (6 weeks), Pediatrics (6 weeks), Psychiatry (6 weeks), Surgery (12 weeks)

Year 4: 1 Required & 1 Elective Course (Clinical Clerkships)

Neurology (4 weeks), Elective Clerkship (12 weeks)

Insecurity Verses Professional Security

This inept education creates a very ironic scenario. Co-mingled are the endemic insecurity in one's professional clinical abilities and the very real security in one's professional future. On both accounts, for these medical practitioners, the introduction of something other than tradition is threatening. Thus, the beneficial effects of nutrition or alternative healthcare remedies fester the physician's professional insecurity by exposing the inherent flaw in the allopathic philosophy and practice; and it threatens their presently secure professional future for the same reason. For if the general population realized that health and cure are achieved by something other than allopathic intervention with synthetic drugs the entire profession would be in jeopardy.

Chapter Four

The Code of Silence

“Doctoring must be very easy to do since doctors always bury their mistakes.” Stated in 1947 by Fred Raber,³² sadly, there is more truth than satire in the statement. Doctoring easy? Oh yes, quite. Good doctoring? Now that is a different issue. No, good doctoring is not easy. Indeed it is very demanding. Good doctoring requires a physician to be a perpetual student—ever studying to master every aspect of the procedures they perform and the diseases they hope to control. But mere doctoring? Well, for this a physician needs no more than the original, aforementioned, inept medical college education. There are far too many incompetent physicians practicing medicine to argue otherwise. The country is littered with medical practitioners that make one wonder how they ever passed the

licensing exam, much less how they ever made it through medical school.

Not only is the medical education minimal at best the license to practice medicine does not signify either initial or continued competence. And even if the initial education was stellar and the licensing exam a real challenge, in the fast-paced ever-changing world of medicine, as Inlander points out, of what good is a twenty-year old diploma if there has been no learning since?³³

Since the Institute of Medicine published its November 1999 report entitled *To Err is Human: Building a Safer Health System*, medication errors have been at center stage. This is a good thing. It is imperative that the public finally take note of this age old atrocity. It is imperative that physicians finally be held accountable for their errors. But errors are one thing, incompetence is another. Even the best clinical practitioner will make occasional errors, but incompetent physicians (which I submit are the vast majority) do not merely make errors they practice by them.

Error and Misdiagnoses is the Norm

Multiple studies have demonstrated the medical profession's consistent inability to make correct diagnose. Even despite multiple advanced medical technologies diagnostic accuracy is no better today than it was a hundred years ago. In fact, incorrect diagnosis is so prevalent that it is now considered routine. It is for this reason that patients are always encouraged to seek a second or third medical opinion and it is the reason that physicians themselves seek other opinions. They do not treat themselves because they are all too aware of their personal inability to diagnose correctly.

By the turn of the century (i.e.1900), the Mayo Brother's Clinic—already a medical Mecca—had been widely praised for its

amazing 42% diagnostic accuracy.³⁴ After reviewing 3,000 medical records at Massachusetts General Hospital in 1912, Cabot's well-publicized study reported the clinical diagnostic accuracy to be about 60%.³⁵ According to Dr. Charles Mayo, by 1927 the diagnostic accuracy at the clinic had improved to 50% while he taunted that the accuracy of the mere lone practitioner remained, at best, a dismal 20%. T. Swann Harding recounts Dr. Mayo's boast before a surgical congress in Washington, D.C.

The Mayo Clinic had attained the phenomenal record of fifty percent correct diagnosis. . . . It is probably a high mark for all time. Certainly few would contend that the snap diagnosis of the average general practitioner working alone is right in more than one case of five.³⁶

Twenty-five years after Cabot's study, Gall examined another 1,000 cases at Massachusetts General Hospital and found no change from Cabot's original figures.³⁷ Nor did he find change in the 1960's after reviewing another 1,000 patients at Cincinnati General Hospital.

Another study in a 1993 edition of the *Journal of Nursing* reported that thirty consecutive postmortem examinations revealed an incorrect clinical diagnosis of 33%.³⁸ The author concluded that in 23% of these cases, the correct diagnosis would have dictated a different treatment. A recent study, published in the February 2001 edition of the prestigious medical journal *CHEST*, reviewed 91 postmortem examinations of 401 deaths in the MICU and discovered a 20% incorrect clinical diagnosis. Of these, it was determined that 44% would have been treated differently if the correct diagnosis had been made prior to death.³⁹

Other researchers routinely report similar results. In 1996, a major university hospital admitted that when the sum of all diagnostic errors for the year were tallied they ranged between 40% and 60%—

similar, the author confessed, to those in the aforementioned surveys of Cabot and Gall. Although the report modified this damaging data by discussing differential categories of misdiagnosis, at last it conceded that “despite the increased scope and improved quality of diagnostic technology, the frequency of misdiagnosis has not decreased appreciably.”⁴⁰

A Matter of Faith

I highly doubt any of us would frequent an auto mechanic with a 50% accuracy rate in identifying a vehicle’s problem. I guarantee no physician would, yet they seem perfectly content to practice in a field in which such pitiful troubleshooting accuracy is the norm. And we seem perfectly content to let them.

It is not without reason that Robert Mendelsohn, MD, has said, “I don’t advise anyone who has no symptoms to go to the doctor for a physical examination. For people with symptoms, it’s not such a good idea, either. The entire diagnostic procedure—from the moment you enter the office to the moment you leave clutching a prescription or a referral appointment—is seldom a useful ritual.”⁴¹ Thus, he warns, “you should approach the diagnostic procedure with suspicion rather than confidence.”

The crux of modern medicine is diagnosis. Treatment hinges upon diagnosis. The objective of allopathy is to first make a differential diagnosis and then to provide treatment. This then begs the question: If physicians’ diagnoses are incorrect about half of the time, then of what use are they? Considering the toxic nature of most of their synthetic pharmaceutical therapies (even when used according to design much less when prescribed incorrectly), are they not doing more harm than good? For if they diagnose incorrectly, they prescribe incorrectly; and if they prescribe incorrectly, their

poisonous medications can do much harm. At the very least they will not affect a cure and the patient will continue to suffer needlessly, while paying a handsome price for it. Add to this the separate but related issue of the very real likelihood that even if the physician's diagnosis is correct the odds of actually prescribing the correct treatment regimens are as pitifully unlikely as is correct diagnoses. A recent JAMA article aptly illustrates this point: "71% of newly licensed family practitioners prescribed potentially inappropriate medication to their elderly patients, . . ."⁴²

Unlike the public, physicians are acutely aware of their failure rate. That is why doctors need your trust. Speaking of your trust, Dr. Mendelsohn says,

Don't believe for a minute that they don't play it for all it's worth. Because what's at stake is the whole ball game, the whole ninety percent or more of Modern Medicine that we don't need, that, as a matter of fact, is out to kill us. Modern Medicine can't survive without your faith, because Modern Medicine is neither an art nor a science. It's a religion."⁴³

Speaking of physicians as harmful is more than mere hyperbole. Harm does exist; harm that is recognized by many physicians and spoken of in professional publications. The National Roundtable on Healthcare Quality recently made a dismal observation.

Serious and widespread quality problems exist throughout American medicine. . . . Very large numbers of Americans are harmed as a direct result. Quality of care is the problem, not managed care. Current efforts to improve will not succeed unless we undertake a major, systematic effort to overhaul how we deliver healthcare services, educate and train clinicians, and assess and improve quality.⁴⁴

.....

The burden of harm conveyed by the collective impact of all of our healthcare quality problems is staggering. It requires the urgent attention of all the stakeholders: the healthcare professions, healthcare policymakers, consumer advocates, and purchasers of care. . . . Meeting this challenge demands a readiness to think in radically new ways about how to deliver healthcare services and how to assess and improve their quality. Our present efforts resemble a team of engineers trying to break the sound barrier by tinkering with a Model T Ford. We need a new vehicle or, perhaps, many new vehicles. The only unacceptable alternative is not to change.⁴⁵

It is imperative that the nation regains control of its health. Medical knowledge abounds, readily accessible to everyone. It behooves the public to make use of this information. The 40% to 60% incorrect diagnoses⁴⁶ are unacceptable—not to mention the preponderance of incorrect treatments and conflicting drug prescriptions even when the diagnosis happens to be correct. Could this be why most physicians opt not to threaten themselves? They know they don't know what they are doing, but they sure hope the other guy does.

Mum's the Word

For the most part, medicine is a self-policing body. Although the concept of peer review exists to address those who practice with questionable skills, that is all it is, a concept. A nominal process at best that seldom does more than wag its proverbial finger at the convicted and, although far more seldom, casually confronts the

accused. Even more seldom is anyone actually even accused. As a rule, physicians do not speak out against each other and non-physician complaints are not taken seriously. In fact, non-physician complaints largely fall on deaf ears.

State-licensing boards view non-physicians as less educated, less intellectual than physicians. Certainly, in their view a non-physician is not capable of making accusations against someone so highly educated as a physician. And certainly a non-physician cannot understand anything about medicine—after all they have not experienced the fraternal hazing of internship.

That physicians bury their mistakes is common knowledge; true both literally and figuratively and practiced routinely, both individually and with group participation. That physicians allow their peers to continue maiming and even killing patients without speaking up is unconscionable; but it is a permanent part of medicine—consciously built into the system. Upon graduating from medical school and before beginning their career, every physician openly pledges the oath of Hippocrates to “first, do no harm.” But in secret a more compelling oath has permeated the hallowed halls, an unspoken oath in which it is understood that “one never accuses a colleague.”

But occasionally this code is offended. As in the case of the notorious Dr. John Nork, an orthopedic surgeon who finally admitted to maiming at least thirty patients, mostly during botched laminectomies. It was bad enough that Dr. Nork had been performing these unnecessary surgeries simply to make money; even more alarming was that his colleagues knew all about it and let him get away with it for at least nine years. When finally exposed, the Honorable B. Abbott Goldberg, a judge in the Superior Court of the State of California characterized Dr. Nork as an “ogre, a monster feeding on human flesh.” The judge described the evidence against him as a “Grand Guignol of medical horrors.”⁴⁷

A Case of Iatrogeny

Sadly, incompetent physicians (albeit not as overtly heinous as Dr. Nork, but incompetent none the less) are not the minority. Such practitioners are far more prevalent than the public is aware but, largely due to the fraternal code of silence, few are ever exposed. Those who are exposed are victims of betrayal and it is likely that something far beyond mere incompetence—which seems to be a norm for the profession—caused the code to be broken.

I cannot refrain recounting my first two known exposures to this unspoken oath of silence. In the first I said nothing; in the second I spoke up but no one listened. It was the mid 70s. I was a young respiratory therapist, in my first years of practice. Each incident took place in different hospitals in the Northwest.

Of the first I remember little, other than the surgeon, Dr. “W”—a young man perhaps in his late 30’s with movie star features who always, yes always, had about four or five women ranging in age from 18 to 80, hospitalized recovering from a hysterectomies. And I remember that the hospital staff used to joke amongst themselves that he hated women and kids.

Literally being the new kid on the block (for this was my first fulltime job in the field), I did not say anything or attempt to expose what seemed to be an extraordinary practice, which he had been practicing for many years. However, I am somewhat pleased to report that about ten years later, I heard on the nightly news that Dr. “W” had lost his license to practice medicine in that particular state for performing unnecessary hysterectomies. I say “somewhat pleased” because it took so long for him to be exposed. I cannot help thinking of all the women who needlessly lost their ability to bear children. By my rough and conservative calculations, over the many years he had been doing this dastardly deed he easily could have removed more than 5,000 uteruses. Just as depressing is that after

having lost his license in that particular state it is very likely that he merely moved to another state, acquired another license to practice medicine, and resumed his practice.

The second incident is an even more vivid memory. It has haunted me for three decades. I was in my second year of practice, working in a small rural hospital. One afternoon a man in his late 40s arrived via ambulance with an acute myocardial infarction (MI) in progress. After emergent treatment he was admitted to our small Intensive Care Unit.

Later that afternoon he arrested—an abrupt burst of tachycardia (an extremely rapid heart beat) suddenly turned to asystole (no heart beat). We performed CPR and within minutes a normal sinus rhythm resumed. Although he appeared stable a few hours later it happened again, the same scenario. As the hours passed and night became morning, it happened again and again and again. By the time the physician finally arrived, just after daybreak, we had “coded” this gentleman at least five or six times, and I had long since inserted a breathing tube into his throat and placed him on a mechanical ventilator.

Throughout the night I had grown increasingly curious as to what was happening. What was causing this repeated bizarre scenario? I reviewed his charts looking for clues. Having performed the EKGs, I knew they showed three abnormalities: an acute MI (an issue of impaired blood flow to the heart muscle), a left bundle branch block and a 1st degree AV block (each an electrical conduction problem within the heart). When I checked the medications that the physician had ordered upon the patient’s admission from the emergency room at once I realized what was happening.

The physician had prescribed a certain cardiac antiarrhythmic drug that was actually contraindicated for not one but all three of these abnormalities. According to the Physician’s Desk Reference—

literally, the physician's bible for prescription drugs—this medication in the presence of any one of these abnormalities could cause sudden tachycardia followed by asystole.

I showed the evidence to the nurse in charge of administering the drug. She agreed. I told the head nurse. She also agreed. When the physician finally arrived I told him as well. He did not agree and he ordered for the medication to continue. It did; so too did the cardiac arrests.

Later that morning I consulted another physician. He agreed that the medication was causing the problem. I asked him if he would do something about it.

“No, he's not my patient.”

I asked if he would speak to the attending physician.

“No, I cannot interfere,” he said.

Before noon, I had consulted three other physicians. Each agreed that the medication was the problem and each refused to do anything about it. By the next day I had consulted three more physicians, two cardiologists and one internal medicine specialist. They too agreed that the medication was the problem and they too refused to do anything about it.

Somehow, as the acute injury slowly healed over the next several days, the cardiac arrests became less frequent and finally subsided. After nine days the patient was discharged and we all breathed a huge sigh of relief. He had survived in spite of blatant and stubborn incompetence.

Then two weeks later the gentleman returned to the emergency room, again via ambulance; only this time he was DOA. In his possession was a bottle of the offending antiarrhythmic drug. The physician had sent him home on a rather large daily dose. Although

the acute MI had healed he still had the two chronic, contraindicated electrical conduction abnormalities: the left bundle branch block and the 1st degree AV block. Evidently the toxic substance had slowly accumulated to the level that caused a sudden onset of tachycardia followed by asystole; only this time no code team was present to revive him.

I pleaded with each of the physicians with whom I had earlier consulted to report this to their state licensing board. Each refused to do so. One of them told me that three of them had report this physician a few years earlier and that they were basically chastised by the state licensing board for having done so, for having broken the unspoken code of silence.

I struggled with telling the family. Should I let them know what had happened? Would anyone listen? I had already been very vocal and it seemed only to fall on deaf ears. In the end I let it drop. I did not tell the family and I have wondered to this day if I did the right thing. Nothing was ever done about it. It was soon forgotten and the physician in question continued his incompetent practice, no doubt hastening the death of many other victims, or as they are called in medicine, patients.

These are but a couple of the numerous events by numerous incompetent physicians that I have witnessed in the clinical setting. Unfortunately the code is strong, even hovering over the nursing and ancillary healthcare professionals. Ironically, for both the physician and the non-physician healthcare worker, it is insecurity that maintains their silence. Both the nursing and the ancillary healthcare professionals are taught to stand in reverence to the all-knowing, almighty physician who is bigger than life and greatly honored by society. "Who are you to question such an icon?" On the other hand, the physicians, knowing this is but a facade, are all too aware of their personal incompetence. The universal protective, prevailing wisdom

of the incompetent is that it is not wise to shine light on another's faults, for someone might then shine light on your own.

Medical Incompetence Goes Unpunished

Not only does medical incompetence abound and go largely unreported, it also goes virtually unpunished. Even when physicians report a colleague it is extremely likely that nothing significant will come of it. And those physicians who are disciplined are likely to suffer minimal repercussions.

The New York Times recently ran an investigative story on how difficult it was for disciplined physicians to find work. Disciplinary records and hospital admitting records revealed that over the last eight years more than 75% of the 285 physicians punished for clinical care issues simply resumed work almost immediately following the state's action against them. Either they continued working at the hospitals where the problems occurred or were merely hired at another facility. This was especially true of those physicians who generated a lot of money for their institution. Ironically, doctors with disciplinary problems are often among the top third moneymakers at their particular facility. In 1999, thirty-two of the hospitals in New York State employed physicians with disciplinary records who were among their top revenue generators.⁴⁸ By December of 2003, consumer advocates of this state claimed that as many as eighteen lives per day were being lost because of the "state's lax enforcement of medical misconduct."⁴⁹

The state health department has been criticized for failing to revoke more medical licenses, but officials say a "complicated disciplinary system" makes that action difficult. Although neither the state, the federal government, nor the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) have policies on

hospitals handling this problem, they do argue that hospitals themselves are obligated to weed out bad doctors.

But this puts hospital administrators in a difficult and perhaps unrealistic position. They are not part of a regulatory agency, they are businessmen charged with making a profit for the investors. A recent survey by Merritt, Hawkins & Associates, showed that the average physician brings in about \$1.5 million in business to the hospital.⁵⁰ Therefore, administrators eagerly view the state's refusal to revoke a medical license as a vote of confidence that the physician is fit to continue practicing. Furthermore there is the code, both the business administrators and those key administrators who are actually physicians themselves are reluctant to punish one of their own.⁵¹

Everyone Knows But the Patient

Unfortunately medical errors are not uncommon and seemingly it is known to nearly everyone but the patient. A recent survey by the Robert Wood Johnson Foundation, conducted in the spring of 2001, questioned 600 physicians, 400 nurses and 200 senior hospital executives.⁵² Herein, 95% of physicians, 89% of nurses and 81% of senior hospital executives admitted to having witnessed serious medical errors firsthand. The study also found that,

- 58% did not consider the U.S. healthcare system excellent or even very good at providing safe and effective treatments.
- 72% said the system needs fundamental change.
- 61% accepted common errors as routine practice.
- Only 45% believed perfection should be pursued.
- And only 29% believed they could provide leadership to improve the system.

This problem is very real. I contend that its prevalence is due not to the occasional error committed by those few who know what they are doing, but to the host of incompetent physicians who do not merely make errors they practice by them. Whether there are available funds for expensive drugs and diagnostics procedures (even if they worked) is a moot point when the majority of physicians are not adequately prepared to utilize them.

Medical incompetence and therefore medical error is rampant and the cause must lie at the feet of the American medical establishment. They have set the tone. They have paved the way for failure. They have sanctioned the inept medical education that sends necessarily ill-prepared physicians into clinical practice and, despite the known harm to society, the allopathic leaders continue to allow and even encourage these incompetent physicians to advance their practice. Desperately hoping to keep the tradition of heroic intervention alive they—this elite society of medical magnates—continue to discourage holistic health by nutrition and foolishly encourage the treatment of metabolic disease by mostly ineffective synthetic substances.

National Practitioner Data Bank

The medical profession is well aware of its incompetence and I am confident that in time the public will also become aware of the ineptitude in which they have placed their trust. Already a recent rash of publicly exposed episodes involving physician incompetence has sparked public interest in physician safety records. Advocates for full disclosure of these records argue for public access to the National Practitioner Data Bank (NPDB)—a cohesive national repository for all instances of disciplinary action against physicians.⁵³ Their voices, heard on Capitol Hill, culminated in the September 7, 2000, federal legislature's proposal of the Patient Protection Act.

However this is presently, and sure to remain, little more than placation on the part of the government. There is a major obstacle perhaps even a conspiracy, to prevent the collection of this data, much less its dissemination. Of course physician groups strongly oppose the Patient Protection Act; claiming inaccurate records are unfair indicators of physician performance. They have recommended as an alternative that information on physician credentials and disciplinary actions be obtained from state-run data banks. But this too is a failure. Although twenty-eight states already have some form of publicly accessible data the profiles can be sketchy at best. Few states supplement the files with information on disciplinary actions, medical malpractice, or criminal convictions.

A report issued by the General Accounting Office (GAO) described much of the data in the NPDB as “incomplete, inappropriate, inconsistent, and inaccurate.” Nearly all medical malpractice records were incomplete. In addition, about one-third of the reports containing clinical restrictions against individual physicians were also missing important information.⁵⁴ This is hardly surprising considering that in the ten plus years the data bank has been in operation mechanisms to ensure the quality and accuracy of reported information have never been put into place.⁵⁵

Physicians Recognize the Problem

Incompetent physicians rendering poor care so permeate our society that it is often a subject of discussion in the medical journals. Although these articles, written by physicians, seldom use the term incompetence and seldom do they actually address the real cause of the problem—that is their inept education, they do acknowledge that a problem exists and, in a general sense, that physicians need better training.

Sometimes they come up with rather curious solutions to the problem. For example, a 1997 JAMA article, written by a physician, entitled *Managed Care is not the Problem, Quality is*,⁵⁶ suggests that perhaps critical x-ray films should be read independently by two physicians “to reduce observer variability”—a gentle way of saying error without actually admitting it. The author reasoned that this would result in greater value to the public for their investment.

Now I fail to see the logic in this solution. The problem being addressed is that physicians are very likely to misinterpret critical x-ray films. If the first physician is likely to misinterpret the x-ray, by what reasoning do we assume the second or third will not do the same? These physicians would have received the same medical education and passed the same licensing exam as the first. True, statistically the odds are improved—like flipping a coin three times is more likely to yield heads than is a single flip; but somehow this is not a very reassuring scenario for supposed scientific tests. At least with the coin you can see the heads, but how are we to know which physician’s interpretation is correct? Or if indeed any is correct?

The idea of actually teaching physicians how to interpret the films properly in the first place might be a novel solution. This would provide both quality care and efficient utilization of resources. Not only would the job be done correctly but a job for one would be performed by one rather than two or three.

Chapter Five

Your Physician, Your Local Drug Pusher

We are a drug-ridden nation. Not illicit drugs so much as prescribed pharmaceuticals, which are far more prevalent and devastating. Illicit drug use is a factor to be sure; but it is merely a symptom of and pales in comparison to the bigger, government-regulated, problem. Although illicit drugs claim a number of lives and cause crime rates to soar generally the users are willing, promiscuous individuals. However, prescription drugs are literally forced down the throats of an unsuspecting innocent population. Many of these drugs do little more than provide temporary relief or even worse simply mask disease symptoms at the expense of the victim's future health. In the meantime the primary objective is met: the pharmaceutical stocks continue to grow and divide.

Just as medical education is the greatest shame in academia the booming pharmaceutical industry is the greatest business scam of all time. These once ridiculed “snake oil” salesmen of the 1800's—often drummed out of town for their false claims, are now subsidized and regulated by the federal government. Every year they peddle many billions of dollars of unnecessary synthetic chemicals to the American public.

The Most Profitable Industry

The pharmaceutical industry is by far the most powerful and wealthy of all the industries associated with the medical community. Due to government subsidies, substantial tax advantages and physician compliance, drug companies realized an average return of 18.6% on revenues in 1999. Indeed, bar none, the pharmaceutical industry is the most profitable industry in the United States.⁵⁷ It has held hostage both the nation’s health and the nation’s budget for many years.

Pharmaceutical companies spend \$24 billion a year on research and development as the encyclopedia of pharmacopoeia grows ever larger.⁵⁸ This never-ending cycle is out of control: create new drugs, market the new drugs, develop more new drugs to replace yesterday’s drugs (those with expired patents) and race them to market. Even the Food and Drug Administration (FDA) is a participant.

The FDA approved 86 new drugs in 1992. By the year 2000, that number had jumped to 106. At the same time, they decreased the average approval time from more than twenty-four months to less than twelve.⁵⁹ According to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) publication, *Sentinel Event Alert*, there are “tens of thousands of brand name and generic drugs currently on the market.”⁶⁰ Not that this is necessarily a bad thing but industry insiders know the driving factor behind these new drugs is not to affect cure or even to provide more effective products; the

primary reason for most of the new drugs is simply the company's bottom line.

Some analysts projected that the 2000 federal drug prescription program would cost as much as \$125 billion.⁶¹ Their predictions were wrong. The actual cost rose from \$111 billion in 1999 to \$131.9 billion in the year 2000. This larger than expected increase was attributed to the number of prescriptions, newer more expensive medications and aggressive marketing tactics. According to the National Institute of Health half of this \$20.8 billion inflation came from just twenty-three drugs; at the same time the volume of the fifty most popular retail prescription medications also increased 18.6%.⁶² Factor in consumer safety along with the lack of clinical necessity for many of these new drugs and suddenly it is very much a matter of ethics. In some cases, it is a matter of legality.

Government Mandated Drug Use

Beyond the FDA's participation, legislators have also gotten involved. Stringent government regulations as to the type of medical services and therapies that are reimbursed virtually necessitate public compliance with allopathic pharmacopoeia. An obscene amount of public tax dollars is spent on drugs for Medicare and Medicaid recipients, many of whom might prefer alternative therapies but the government will not allow it.

In a recent court ruling even the judicial branch of government has gotten involved, ruling that employers must pay for specific types of medications for their employees. Clearly public participation in this scam is a government mandate. This, despite the fact that other medical philosophies and many scientists argue that it is absolutely impossible for these inorganic synthetic chemicals to supply organic tissue with necessary nutrients for health and life.

Even though the drug companies admit their products are harmful toxins, physicians continue to prescribe them haphazardly as

if they were mere candies. A prime example of this careless practice is the simple antibiotic. Penicillin worked miracles when it was introduced only a few decades ago. But in very short time, due to misuse, the bacteria had adapted to this miracle. Not to be dissuaded, we manufactured other antibiotics. And for the same reason, the microbes adapted to them as well. So we created more and more still; but the resilient bacteria would not give up. Now, on some fronts, the microbes are on the verge of actually winning the war.

Antibiotic-resistant bacteria are on the rise. This is especially true of certain bacterial strains that originally appeared to be incapable of developing resistance. Many years ago the Centers for Disease Control warned that excessive and unnecessary use of antibiotics would lead to the evolution of superbugs. They also warned that these superbugs would be difficult and expensive to treat. Prior to 1980, in the U.S. more than 99% of all streptococcus pneumonia was sensitive to penicillin. This is no longer the case. Today we face a growing community epidemic of streptococcus pneumonia with clinical laboratory findings of penicillin-resistant pneumococcus to be nearly 30%. Between 1995 and 1998, the percentage of pneumococcal illness caused by bacteria resistant to three or more classes of antibiotics rose from 9% to 14%.

The cause for these resistant bacterial strains? . . . Physicians. Despite years of warning from the scientific community, clinicians continue to prescribe antibiotics for medical conditions for which they have no affect.⁶³ It is estimated that more than half of all antibiotic prescriptions are unnecessary. A 1997 article in JAMA reported that 51% of patients with colds, 52% of patients with upper respiratory infection and 66% of patients with bronchitis are given antibiotics. Another study found that in the state of Kentucky, 60% of the patients with common colds and 75% of the bronchitis patients were prescribed antibiotics.⁶⁴ Not that Kentucky is to be singled out as a prime offender, this just happens to be the state in which the

study was performed. I would be more than surprised if this did not reflect the situation in the rest of the nation.

The same edition of JAMA reported that, “Physician focus groups say the major reason is unrealistic patient expectations, coupled with insufficient time to discuss with patients why an antibiotic is not needed. . . .”⁶⁵ But I reject this excuse. The only expectation the patients have is that which the medical community has coaxed them into believing and expecting; that is, that their doctor has a magic pill for every disease.

One must wonder if physicians are more concerned with the promotion of health or the promotion of product. At the very least, it would seem that the primary task of the modern doctor is not to teach health to their patients but to peddle the synthetic chemicals of their master, the pharmaceutical industry—from whom their power and ultimately their sustenance comes. But Dr. Schwartz hits upon the crux of the matter when he says, “Although less readily admitted, physicians’ inadequate knowledge of the respiratory symptoms and signs and natural history of respiratory illnesses also contributes to antibiotic overuse.”

It is but an easy copout to claim “insufficient time to discuss” options with patients. And it is a convenient way to ignore the real issue that many physicians are too busy making money, cranking patients through the system, to actually stop and play doctor with them; and furthermore, as Dr. Schwartz has pointed out, many of the physicians frankly don’t understand the diseases. They are simply ignorant of the symptoms of a common colds, bronchitis and simple upper respiratory infections. If nothing else, this is a very scary thought to realize that perhaps half of our physicians know less about a common cold than our grandmothers. It also begs the question: what then do these physicians understand if not these common illnesses?

Writing Prescriptions is a Business

The medical license is the physician's key to the franchise, a guaranteed distributorship. The franchise is drug distribution and the business is writing prescriptions. This is why physicians are so opposed to other health professionals having the authority to write prescriptions, or for medications to become unregulated, over the counter items. Neither public health nor public safety is the issue. The issue is simple economics.

Writing prescriptions is the physician's bread and butter and they are writing more than ever. And, as the physician study group revealed, the physicians know that this is why the patients come to see them. On average the elderly were given about twenty prescriptions per year in 1992, they now have roughly twenty-nine. By the year 2010, they are expected to have about thirty-nine prescriptions a year;⁶⁶ this, despite the fact that few of these drugs are actually necessary. But writing drug prescriptions is tradition and those who break from convention are subject to peer ridicule as David Morris, MD, of the prestigious Hebrew Home for the Aged, recently discovered. After a methodical evaluation of each patient's drug regimen—giving special attention to medications for diabetes, hypertension, high-cholesterol, depression and other chronic illness—he began to wean his patients (average age of 88) off the unnecessary medications. The reaction from other physicians and even some of the patient's family members was described as “vehement opposition to his unusual crusade.”⁶⁷

Creating a Need

Physicians are simply the middlemen through which drug companies peddle their wares. Drug manufacturers can sell drugs only if people and their physicians are convinced they need drugs.⁶⁸ As evidenced by the aforementioned incident at the Hebrew Home for the Aged, the pharmaceutical companies are succeeding quite

well. The industry uses several strategies and spends billions of dollars a year to convince us we need their lethal synthetic substances. While many marketing pitches are geared to creating a consumer desire for their product based upon want, the drug industry purposefully aims for a consumer desire based upon need, or rather perceived need; and it is a very successful tactic.

First they must convince us that we are sick. In general, this is an industry wide effort.⁶⁹ Then each company must convince us that their product is the only, or at least the best, agent of cure. To assist the pharmaceutical industry in achieving their goal President Clinton allowed the removal of certain obstacles. Federal regulations were loosened in 1997 to allow the drug industry to provide more direct-to-consumer advertisement. Access to the mass media, once highly regulated became an open door. The drug industry seized the opportunity and immediately turned their attention to television, radio and magazine advertisement.

Although nothing happens until the doctor writes the prescription marketing experts know that physicians will comply with a patient's request for a specific medication about 70% of the time.⁷⁰ This marketing strategy is validated by a recent report in the Associated Press. "Drug companies are promoting their top-selling prescription medicines with the same tactics used by mass merchandisers: coupons and, in some cases, money-back guarantees." Several major companies are mentioned, including Bristol-Myers Squibb Co., Eli Lilly & Co., Novartis Pharmaceuticals Corp., and Schering-Plough Corp.⁷¹ Obviously the drug companies are expecting physician compliance, for they are the gatekeepers, the procurers who ultimately must write the prescriptions.

This strictly for profit objective is illustrated by the lucrative non-steroidal anti-inflammatory drug market. The ads for these medications seem endless. It is difficult to thumb through a magazine or watch television for even a few hours without confronting one.

Holford has pointed out that in the United States alone this is a \$9.5 billion business: \$5 billion to treat the pain and \$4.5 billion to treat the side effects. True, the drugs provide temporary relief from certain pains; but thousands of people die every year from the side effects and the drugs actually hasten the progression of arthritis—the primary illnesses for which they are recommended.⁷²

But this is of little or no concern to the pharmaceutical industry. And seemingly neither is it a concern to drug prescribing physicians. Also of no concern to physicians is the fact that often harmless, effective, alternative therapies exist. Type II cologne, for example, as found in the chicken breastbone, is a proven treatment for arthritis. Numerous allopathic studies have shown that it will re-grow lost cartilage in damaged arthritic joints and actually reverse the disease process.

Perhaps this lack of concern is due to naïveté, but it is more likely due to profitability. Type II cologne and other such treatments are foods not drugs and therefore not viable treatment options for the allopathic practitioner. The medical doctor's express role is to prescribe controlled, patented substances. It is for this reason the physician possesses a medical license. Foods and other non-pharmaceuticals cannot be patented, ergo they realize little to no profit to the pharmaceutical industry.⁷³ Furthermore, of what good is a physician's medical license if our symptoms and diseases can be resolved with micronutrients?

Pandering

Pandering is a considerable portion of the pharmaceutical budget. Recently the Boston Globe reported that drug companies dispatched about eighty-three thousand sales representatives and spent more than \$15 billion in the year 2000, marketing primarily to physicians. Residents are especially targeted because they have long hours, low pay, and a lack of experience that makes them hungry and vulnerable.

Perhaps more important, they have a lifetime of writing prescriptions before them. The drug companies know that the earlier they bring these “prescription writers” into their stable the more money they will generate.⁷⁴

About \$8 billion alone was allocated in the year 2000 to provide free drugs to physicians.⁷⁵ It is not uncommon for a drug company to be entangled in somewhat questionable relationships. One company blatantly offered physicians \$100 dollars for simply reading their literature which encouraged the use of a highly toxic drug that had not yet been approved by the FDA. Lynn Payer revealed that another company offered a researcher \$20,000 if he could publish a “seemingly responsible—and positive—study” in a major medical journal.⁷⁶

Unrestrained marketing practices in the name of education are another common expenditure. From 1975 to 1988, some \$86 billion was spent on 34,688 symposia.⁷⁷ Although advertised as educational seminars, many of these gatherings are little more than elaborate sales pitches at which physicians are wined and dined at the very least and often far more is included.

Physicians who speak at these educational seminars are paid a handsome fee for their services. Again, Prayer has recounted Dr. James Sanders’ invitation to speak about his topic of expertise: drug and alcohol abuse. When asked what drugs he would be discussing so the organizer could find a drug sponsor, he responded that he was “trying to get addicted people off prescription drugs, rather than on them.”⁷⁸ With this his speaking invitation was revoked.

Lynn Payer also tells us of the experience of Ralph Lach, MD, Director of the Adult Cardiovascular Training Program at Mount Carmel Medical Center. He has been critical of high cholesterol medications and admits that dissenters like himself are suppressed in a passive fashion. There is no forum for his anti-medication viewpoint. When he speaks of the lack of clinical evidence as to the

benefit for cholesterol-lowering drugs his honorarium is nonexistent. Meanwhile, advocates for cholesterol-lowering drugs are readily supported by the pharmaceutical industry.⁷⁹

Such is the case with L-Arginine, a known, natural anti-cholesterol agent. Who is going to sponsor a speaker for this topic? Especially since—according to the most recent 2001 NIH report—cholesterol medications were one of the top four selling drugs.⁸⁰ The subject of L-Arginine and low cholesterol is not likely to appear at any “educational symposiums” in the near future. L-Arginine is a simple amino acid that cannot be patented. Therefore an outlandish markup is not justifiable. But the ineffective, even dangerous anti-cholesterol drugs are patented and therefore able to demand the obscene markup. Modern medicine is a simple economical arrangement. The pharmaceutical companies pitch drugs to the physician and the physician peddles them to the patients.

Dr. Atkins has charged that the drug industry has seduced the entire medical profession. Physicians, who at one time were “open to any therapeutic system that appealed to a rationalist’s intellect,” now assume the only answers are pharmaceutical in nature.⁸¹ Many of his colleagues would seemingly agree, each having written their own book on similar alternative healthcare methods: Robert Mendelsohn, MD,⁸² Guylaine Lanctot, MD,⁸³ Loraine Day, MD,⁸⁴ Rudolph Ballentine, MD,⁸⁵ and Stuart Berger, MD,⁸⁶ are but a few.

Chapter Six

Lies and False Advertisement

The world of medical journals is a curious thing in clinical medicine. Although everyone is aware of potential bias, once an article is printed in a respected medical journal of the Index Medicus it is gospel. Authors and articles are referenced as authoritative, if not revered as infallible. At the very least they are referenced to justify one's own bias. For the physician the entire scope of health and medical knowledge begins and ends with the medical journals and medical textbooks.⁸⁷

Medical journals are also of tremendous importance to the pharmaceutical industry. Here is where physicians keep up on current findings, new procedures, discoveries and most important new drugs. Major pharmaceutical companies have a great deal to say about what these medical journals print. Aside from sponsoring

authors, funding studies, perhaps even owning some of the journals,⁸⁸ the pharmaceutical industry supports nearly all (if not all) of these journals with advertisement dollars.

The issue of medical journals having financial ties to private industry is not new. In the 1870s, Parke-Davis actually purchased several successful medical journals—each headed by leading physicians or professors at prestigious medical schools. Even before the dawning of the 20th Century many prominent medical leaders were salaried by the drug industry. By 1906, all but one of two-hundred and fifty medical journals were supported by pharmaceutical advertisements.⁸⁹

Advertisement Dollars and Ethics

Despite the stated ethical standards (common to every medical journal) and their ostensible commitment to true science the pharmaceutical industry's \$5 billion budget for journal advertisements yields considerable power over what is and is not printed. To illustrate this point Payer tells how a certain major pharmaceutical company once pulled its advertising from JAMA for having published an article that cited its competitor. To placate this powerful drug lord the journal published an appeasement—a make-up article.⁹⁰

Even as I write the *New England Journal of Medicine*, the American Medical Association and the Cleveland Clinic Foundation are openly shopping for more pharmaceutical advertisement funds. Hoping to increase their share the Association of Medical Publications has argued that advertisement in their journals delivers a higher return than other marketing tactics, including physician visits, promotional events and direct-to-consumer advertising. Their contention is that advertisements in professional journals are where physicians learn about the drugs they prescribe.⁹¹

Pharmaceutical advertisements are simply out of control. I understand the logic for placing these ads in professional journals (although I do have ethical issues with the practice); but what I find so bewildering, so non-scientific, is the direct-to-consumer advertisements. Anyone who has watched television for more than an hour has seen them. They are all of the same formula. First comes the absurd hook. On the screen is an attractive model or two partaking of some pleasurable activity. The prospective drug taker (you) is told of all the wonderful benefits this particular drug offers. The implication is that your life could not possibly be complete without it. Then comes the incongruous passionate plea for you to solicit your physician for a prescription. And finally the small print—the soft, rapidly spoken warning that this drug could kill you. Now my question is twofold: if this drug is the new miracle cure for a certain disease and if physicians are the all knowing masters of medicine, then why must the patient direct and beg the physician to prescribe this known cure.

Research Articles and Drugs Companies

The mere publication of research articles does not prompt the rank and file physicians to implement the findings. Most physicians will not employ new therapies until the go-a-head is given by the elite powerbrokers of medicine and this go-a-head is not given to anything that threatens their existence. Such is the case with the voluminous research using L-Arginine for the treatment of cardiovascular disease. Certainly it is not overlooked due to a lack of data. Although a seemingly endless number of research articles tout the benefits of L-Arginine for treating such cardiovascular disorders as hypertension, congestive heart failure and impotence, there is a surprising void of literature directed toward the rank and file clinicians—articles couched in terms that physicians can understand in a practical sense.

Articles that simply tell them to “use L-Arginine for. . . .”

Am I saying that physicians cannot understand scientific articles? Not exactly. But I am saying that few will make the connection from the research to their clinical practice. At least they will not lead the way. Most of them simply will not make the research part of their clinical practice until a major spokesman—a clinical guru—tells them to do so. This is how medicine works. Rank and file clinicians do not break from tradition until directed to do so by a recognized spokesmen of the medical establishment. Those who do break rank face the danger of malpractice accusations among their peers.

Knowing they are the primary source of physician education, medical journals pride themselves on being fair and scientific. Each publication has an ethical policy that, theoretically, avoids bias and conflicts-of-interest. However, in the practical world bias often makes it to print; sometimes fraudulent, sometimes philosophical, but bias is printed.

Earlier, mention was made of a pharmaceutical company that offered a researcher \$20,000 if he could publish a “seemingly responsible—and positive—study” in a major medical journal.⁹² Although it is seldom made public, many believe such outright corruption is commonplace in the world of medical writing and advertisement. Even when knowledge of such corruption leaks it is a soon forgotten and business resumes as usual.

The issue of publication ethics has been a longstanding problem for the New England Journal of Medicine (NEJM)—a primary publisher of medicine’s gurus and recognized spokesmen. Dr. Relman, Harvard Professor Emeritus and past editor-in-chief of NEJM, addressed these concerns as the editor in 1984. His ethics policy demanded that contributors disclose any financial ties to companies whose products were discussed in the article. But the problem of publication ethics persisted and his successor was later

forced into retirement over “administrative and publishing issues.”

The new Editor-in-Chief, Dr. Marcia Angell, eventually resigned her position after discovering that ethical violations still existed within the publication. In mid 2001, the Los Angeles Times accused the prestigious NEJM of admitting that it had violated its strict conflict-of-interest policy. Editors had approved drug review articles despite knowing the authors had received research support from the pharmaceutical companies through their perspective academic institutions.

An internal audit at the journal identified nineteen offending articles, totaling nearly half of the drug review articles published since 1997.⁹³ Although the NEJM claimed a misunderstanding between two editors caused these mistakes, Dr. Angell acknowledged that she had discovered that one editor had told at least one author that it was sufficient just to sign a disclaimer denying any financial associations with drug companies.

Although the journal publicly maintains a strong commitment to its ethical stance on such issues, the outspoken ethical Editor-in-Chief was replaced in May 2001 by a doctor who just happened to be an author of one of the review articles criticized for a conflict-of-interest. Is this not suspicious? At the very least it makes one question NEJM’s commitment to its own ethical policy and to the ethical responsibility it has to medicine in general.⁹⁴

The new editor-in-chief has defended himself saying that NEJM editors knew of his financial ties to the drug company and, he confessed, it is difficult to find colleagues who do not have such ties to the drug industry. The belief that the new editor is too closely tied to the pharmaceutical industry has been raised to a new level by recent reports that his salary has come largely from the pharmaceutical industry. Dr. Relman fears that “business considerations appear to weigh as heavily as editorial

considerations.” The Chicago Tribune has charged that the current ethical crisis at NEJM is significant—even “threatening to destroy medical research.”⁹⁵ The implications of this exposure are tremendous. That the NEJM—one of medicine’s most eminent publications—was caught red handed is more than an embarrassment, it is sufficient reason to suspect that this is common practice throughout the industry.

Because NEJM is a principal medical publication, suspicion is necessarily cast upon the entire medical journal industry. How are we to know when we are reading balanced scientific reporting verses biased pharmaceutical sales hype? A final piece of evidence makes the cloud of suspicion grow even darker and lends support to the notion that the problem is indeed industry wide. Dr. Angell has called for an independent national advisory panel composed of distinguished experts who have no stake in the powerful pharmaceutical industry. She hopes the panel will evaluate industry practices, make non-binding recommendations and generate reform.⁹⁶

On June 21, 2001 Dr. Angell and Dr. Relman wrote in the Washington Post that “Few Americans appreciate the full scope and consequences of the pharmaceutical industry’s hold on our healthcare system.” They cautioned that as Congress considers Medicare prescription drug issues there must be a “thorough understanding of the industry’s behavior . . . It’s time to take a hard look at the pharmaceutical industry and hold it accountable. . . . We can’t think of a more urgent investigative assignment for the Senate Committee on Health, Education, Labor and Pensions.” However, without public outcry their plea is likely to fall on deaf ears. The drug industry has the largest lobby in Washington D.C., contributing sizeable sums to many political campaigns.⁹⁷

Aside from the legal issues and the allegations of dirty money changing hands, there are clinical implications to this corruption. By

their own admission these medical journals are where physicians learn about the drugs they prescribe.⁹⁸ It is bad enough that the journals are filled with legally skewed information in the form of advertisements but we now have evidence that physicians are also indoctrinated by skewed, biased scientific research, which they are trained to worship even beyond reason. This fraudulent information results in an untold number of unnecessary and even harmful drug prescriptions costing the nation both dollars and, no doubt, lives.

“Me Too”

Dr. Angell has also accused the pharmaceutical industry of pushing “me-too” drugs. These are medications with minor variations of established products that bring little, if any, additional value to consumers; but they protect industry profits by ensuring that lucrative patents are renewed.⁹⁹ This accomplishes two things. It brings another product perceived as new and improved to market, and by virtue of the patent renewal it guarantees that prices remain high.

Because pharmaceutical companies can make millions of dollars per day on such patented brand-name prescription drugs, major drug companies often adopt creative court challenges simply to extend patents and delay the introduction of cheaper generic drugs to the market.¹⁰⁰

A single drug can be covered by a maze of patents for everything from the active ingredients to the dosage, which allows pharmaceutical companies to employ loophole legal tactics—taking patent protection disputes to court where even the most frivolous legal argument can delay the introduction of a cheaper generic drug for months. Patent challenges can buy automatic extensions of up to thirty months, with competition prohibited while the challenge is under consideration.

Recent examples of this are readily available. On May 15, 2001, the Federal Trade Commission (FTC) announced its ongoing investigation into the recent charges by the Canadian Apotex Corporation that Smith Kline Beecham has been employing such strategies. They contend that Smith Kline has been blocking generic drug sales by filing numerous additional patents for Paxil. Paxil is the third most popular antidepressant in the country. It is Smith Kline's most popular drug with sales totaling \$2.11 billion in 2000, up 22% from the previous year.¹⁰¹

Other such battles have recently been fought as well. Bristol-Myers Squibb, the maker of Taxol, is contending with the Miami-based Ivax Corporation who hopes to introduce its own generic version. Meanwhile Schering-Plough announced it would soon begin testing the allergy medication Claritin on children, a ploy that would grant an automatic six-month extension to their patent.¹⁰²

The objective of each drug company is to make money and they find very creative methods for doing this. On May 14, 2001, the attorneys general of fifteen states and the District of Columbia filed a federal lawsuit against two drug companies, the French-owned Aventis and the Florida-based Andrx Corp. The states accused these companies of conspiring to keep Cartia XT—a generic version of the popular blood pressure medication Cardizem CDB from going to market.¹⁰³

The Associated Press reported that Aventis paid Andrx handsomely to keep the generic drug off the market for eleven months.¹⁰⁴ In 1996 Hoechst Marion Roussell, now Aventis, had filed a patent infringement suit against Andrx, which according to Michigan's assistant attorney general was an anticompetitive act meant to delay production. He believes the subsequent legal agreement in 1997—from which Andrx received quarterly \$10 million payments—was another delay tactic. Once the payments

totaled \$89 million in June 1999, Hoechst dropped the suit and agreed to give Andrx the right to begin marketing Cartia XT in January 2000.

Although the FTC had charged the companies with anticompetitive practices the charges were dropped last month when the two drug manufacturer's promised not to enter into such arrangements in the future. Neither company was fined and both denied any collusion had taken place. Obviously, the 15 states and the District of Columbia disagree with the FTC's findings. They are seeking \$100 million in restitution, claiming the arrangement between the two companies led to higher prescription costs for state-funded programs such as Medicaid.¹⁰⁵

In yet another case that surfaced in April 2001, the FTC charged Schering-Plough of illegally paying two generic drug companies (Lederle, a unit of American Home Product's Corp. and Upshur-Smith Inc.) millions of dollars to delay the release of their versions of K-Dur 20—another cardiac medication, a potassium-chloride supplement prescribed for hypertension.¹⁰⁶ After Schering-Plough filed patent infringement suits against the two companies, they later agreed to pay Lederle \$15 million to refrain from bringing their generic drug to market until January 2004. The FTC is disputing the settlement, claiming that an additional payment of \$15 million for the licenses of two unrelated generic products was intended to delay sales of generic K-Dur 20. The agency has also charged Schering of paying \$60 million to Upshur-Smith for five unrelated drug licenses as a ploy to postpone the introduction of a generic potassium-chloride supplement.¹⁰⁷

Costing More Than Ever

Seemingly, the drug industry has several successful tactics to assure a solid bottom line. The corruption of scientific research, the legal and illegal strategic maneuvering in the courts, and the filing of

frivolous patents are but a few of the many tricks up their sleeves. They have other ploys mastered as well. Some of the most powerful lobbyists on capitol hill, government subsidies, huge tax breaks, strong marketing and an ever increasing volume of both prescriptions and the cost of prescriptions.

The average cost of new drugs introduced before 1992 was \$30.47; by 2001 this had increased to \$71.49.¹⁰⁸ And while spending on general healthcare increased only 5% in 1998, the cost of drugs increased 15%, with an additional record increase of 17.4% in 1999.

Exploiting the Needy

Dr. Angell has leveled yet another indictment against this multibillion dollar industry. Although the American drug companies reap lavish profits with the help of extraordinary government support, they fail to accept an equivalent degree of social responsibility. She has criticized the industry for having capricious pricing practices that place heavy burdens on those least able to pay. And she claims it has little interest in developing drugs for people with low purchasing power, such as those in third-world countries.

Of course the drug industry argues that high U.S. prices reflect high value, help subsidize lower prices in countries with price controls and provide funds for further Research and Development. However, a major flaw in this argument is that the top ten drug manufacturers spend about 20% of revenues on research and development and as much as 40% on marketing and administration¹⁰⁹ while the actual manufacturing costs are less than miniscule. The deep pockets of the investors in this industry are being filled to overflowing. “Research and Development” and “Quality Product” are nothing more than red herrings arguments meant to divert attention from this, the greatest scam in medical history.

Aside from milking the federal government of subsidies and substantial tax breaks the pharmaceutical industry is holding hostage our senior citizens. Dr. Suresh Madhavan, of West Virginia University's School of Pharmacy, recently told the Senate Health and Human Resources Committee that while part of the spending increase is the result of an increased number of recipients some of it is because the number of prescriptions per recipient has almost doubled. Dr. Madhavan admits that two factors for this increase are the aging population and direct-to-consumer advertising.¹¹⁰ The industry of course, asserts that increased elderly drug spending is a result of more advanced, more effective drugs that could cost far less in the long run by helping patients avoid more costly interventions.¹¹¹ However, John Brown, a lobbyist for Pharmaceuticals Research and Manufacturers of America, has conceded that the industry is simply doing more advertisement.¹¹²

On May 7, 2001, Families USA—a healthcare advocacy group, confirmed that prescription drug costs for seniors have doubled in the last eight years and that it is expected to double again in the next ten. While seniors make up only 13% of the general population they pay 42 cents of every dollar spent on prescription drugs in America. The average cost of a \$42.30 prescription for seniors is expected to rise to \$72.94 by 2010. Presently these drugs, representing some 10% of seniors' total health costs, are expected to account for more than 13% within ten years.¹¹³

Are All These Drugs Necessary?

Beyond the high cost, the poor quality of care generated by the plethora of drugs is even more alarming. While physicians bemoan regulations and plead for more autonomy, it seems clear for public safety that the opposite is warranted. But society and the legislators have been duped. Despite the insane idea the metabolic disease can

be cured or even effectively treated by long-term synthetic drug use, and despite the continual warnings from the manufacturers and the proven negative outcomes, various groups continue to petition lawmakers to incorporate prescription drug coverage into Medicare.

I submit that before subsidizing the high costs of these lethal and mostly useless substances, the government should entertain the reality of the mounting evidence that these medications are excessive and perhaps even unnecessary?

Dr. Madhavan has suggested as much, warning that the more drugs a person takes the more likely that person will develop problems caused by the interaction of the different drugs. According to Mark Beers, MD, a geriatrician and Editor-in-Chief of the Merck medical manuals, “a person taking seven medications is roughly 14 times more likely to have an adverse reaction than a person taking one.”¹¹⁴ These problems also contribute to higher medical costs: more doctors’ visits, more hospital admissions and even more drugs to address the ill effects of previous drugs.¹¹⁵

In the 1998 JAMA study mentioned earlier, in which “71% of newly licensed family practitioners prescribed potentially inappropriate medication to their elderly patients, . . .”¹¹⁶ the author went on to question whether the passing standard of 50% for the board certification exam was high enough. Now there’s a novel idea. What a progressive thought; make the physicians actually get a passing grade before granting them certification. The author was very bold, perhaps even audacious to suggest this.

Considering that each of these drugs works by blocking, or in some way inhibiting, normal body chemistry, merely substituting one imbalance for another¹¹⁷ (thus the need for multiple medications), how can either the drug pushers or the drugs themselves be classified as promoters of health? And why do we continue to follow this trail of disaster? Why indeed? In the face of peer pressure and

government mandate, and because we have been indoctrinated into believing this is health and that these poisons are for our own good, we throw logic to the wind and follow like sheep.

Synthetic drugs are not the answer to the nation's health problems. Although they realize great profit and support many economies, they do not and cannot support life at the cellular level. Some of these drugs can affect some benefit to be sure, but they are few, very few, and they are mostly available in generic form. Overall, society would be far better off without most if not all of these chemicals.

Part Two,
Priority # 2,
Secure the Market to Insure the
Accomplishment of Priority #1

Chapter Seven

An Epidemic and the Neglected Cure

*Cardiovascular disease is at epidemic proportions. As many as thirty years ago, Joe D. Nichols, MD, called it America's "Public Enemy Number One."*¹¹⁸ Although physicians in the 1920s saw very little coronary disease, by the time Dr. Nichols made this proclamation in the 1970s cardiovascular disease (CVD) was the leading cause of death in America. He cited a study of 1,600 autopsies that revealed early stages of CVD in the aortic arteries of every patient past 3-years of age and similar evidence in the coronary arteries of every patient past 20-years. He warned, "We are facing a metabolic disaster in this country." Now, within one generation, his prediction has already come true.

Cardiovascular disease now claims 2,600 Americans lives every day—equal to 1 death every 33 seconds—10,000 plus more lives each year than the next 6 leading causes of death combined. A few more statistics help put the enormity of this problem in perspective. It accounts for 41% of all deaths and 70% of the total mentioned mortality. This means that of more than 2 million deaths from all causes CVD is listed as a primary or contributing factor in about 1.4 million death certificates.¹¹⁹

An additional 60.8 million diagnosed victims are still living and being treated for their disease.¹²⁰ Fifty to sixty million Americans are diagnosed with high blood pressure alone.^{121, 122} This is five times the number of asthmatics, another growing health concern. Chronic hypertension has many detrimental affects on the body. One such effect is congestive heart failure, to which hypertension is antecedent in 75% of its victims,¹²³ And congestive heart failure has been on a steady rise for many years.

- Each year more than half a million new patients are diagnosed.
- Mortality has increased 135% from 1979 to 1998.
- Hospital admissions have increased more than 159% during the same time frame.

Acute myocardial infarction is another devastating result of cardiovascular disease. According to the American Heart Association there are 1.5 million acute myocardial infarctions each year in the United States, which are expected to increase 32% by the year 2030.¹²⁴ Stroke, or cerebral vascular accident (CVA) is yet another casualty of cardiovascular disease. When considered separately from the other cardiovascular disorders stroke is the third leading cause of death, surpassed only by heart disease and cancer.¹²⁵

Financial Matters

On a positive note—at least for the medical community, aside from the carnage there are significant financial implications to this ever-increasing epidemic. Four of the top ten most costly hospital admissions are cardiovascular in nature;¹²⁶ and hospitalization costs on average account for about 40% of our overall personal healthcare expenditures.

In 1997 Medicare alone paid hospitals \$26.9 billion for CVD admissions.¹²⁷ But Medicare hospital admissions account for only a portion of the costs. Medicare CVD patients also tallied some \$62.6 million in doctor visits, \$5.3 million in outpatient department visits which are followed by a substantial number of maintenance medications each year.¹²⁸

Through the year these visits will include any number of possible tests: electrocardiograms, echocardiograms, various cardiac stress tests, x-rays, radiographic fluoroscopy, cardiac catheterizations, percutaneous transluminal coronary angioplasty, pulmonary function tests and many others. For adults, six of the ten most frequently ordered diagnostic and therapeutic procedures are cardiovascular in nature.¹²⁹ Not only are these tests expensive in and of themselves but most of them are accompanied by a hefty physician's interpretation fee to boot. Something the physician receives whether or not the interpretation is correct or even necessary—in that many of the testing devices feature a far more accurate computerized interpretation than any human could ever hope to provide.

There will also be numerous blood tests: lipid levels, hemoglobin and hematocrit, blood gases, enzymes, blood chemistry, etc. After the barrage of tests come the treatments, both pharmacological and otherwise. The average cost of maintenance drugs alone for the elderly accounts for more than 10% of their total healthcare costs.¹³⁰

The Old and the Young

Beyond acute hospitalizations, doctor's office visits, outpatient tests and the daily maintenance drugs, there are the nursing homes. Roughly, 26% of those ages 65 and older have a primary diagnosis of CVD at admission. It is the highest disease category among nursing home residents.¹³¹ Unfortunately, or fortunately for the medical community, all of these statistics are rising quickly. The present population of seniors, 65 years and older, totals 35 million—about 13% of the country's population. But the baby boomer generation constitutes a large portion of society. By the mid 2000s, the senior population will be 82 million, some 20% of the total population.¹³² A substantial increase in cardiovascular disease will follow.

But as Dr. Nichols pointed out, cardiovascular disease is not just a problem of the elderly; neither are all of its victims Medicare recipients. With cardiovascular disorders developing at such young ages, private insurers pay a substantial portion of the overall costs. According to the National Heart Lung and Blood Institute's Framingham Heart Study, 28% of all stroke victims are under age 65.¹³³ Heart problems are even more common among this younger population.

There are about 3.8 million diagnostic cardiac catheterizations and angiographies performed each year. More than 47% are pre-Medicare patients between the ages of 18 and 64 years. Another 1.8 million (42% of the total) open heart procedures are also performed on this younger population, while they receive 2.6 million percutaneous transluminal coronary angioplasty procedures—roughly 50% of the yearly total.

Private insurers pay a large portion of the cardiovascular procedures; and they pay considerably more than does Medicare, which mandates an adjusted reimbursement rate. In toll, cardiovascular disease makes a considerable contribution to the

medical economy. Even by conservative estimates, it is at least a \$170 billion market and more likely well over \$200 billion. It is a market that medicine cannot afford to lose.

The Endothelial-Derived Relaxing Factor

Many physicians such as Dr. Daniel Levy, director of the famed Framingham Heart Study, argue for earlier and more aggressive treatment of cardiovascular disease and hypertension in particular.¹³⁴ But ironically, the most effective treatment at our disposal is simply overlooked—this, despite the fact that this very successful treatment has captured the attention of scientists worldwide. Three of whom have even won the Nobel Prize in Medicine and Physiology for their work in this area.

A series of discoveries by several scientists that began in the late 1970's, which may at first have seemed a mere curiosity, soon challenged established beliefs and ultimately changed our understanding of cardiovascular biochemistry. To the surprise of many, to the expectation of some, and to the chagrin of others, it was not advanced technological, heroic intervention or even a new medication, but the simple gas, nitric oxide that upset convention.

In 1977, Dr. Ferid Murad discovered two surprises: nitric oxide (NO) was released from nitroglycerin (NG) and nitric oxide had specific actions on vascular smooth muscle. But this generated more questions than answers. Then in 1980, Drs Robert Furchgott and John Zawadzki demonstrated that endothelial cells were necessary to affect vasorelaxation. By 1987, Drs Louis Ignarro and Salvador Moncada had identified the endothelial-derived relaxing factor as nitric oxide. The mystery was beginning to come together.

Behaving like a neurotransmitter, NO serves as a signaling molecule for the cardiovascular system, thereby modulating various

smooth muscle functions¹³⁵ that affect vessel relaxation, vasodilation and systemic vascular pressures in general to shunt blood throughout the body.^{136,137} It was also realized that NO is a universal signaling molecule involved in the inflammatory response, apoptosis (a genetically determined process of intracellular cell destruction also called programmed cell death),¹³⁸ and protection against atherosclerosis.¹³⁹

Researchers had simultaneously recognized that a simple amino acid, L-Arginine, played an essential role in the body's ability to produce nitric oxide. L-Arginine, they discovered is the physiological precursor to the biological action that produces nitric oxide.¹⁴⁰ Combined with the isoenzyme endothelial nitric oxide synthase (NOS or eNOS),¹⁴¹ L-Arginine forms a molecule they have dubbed arginine-derived nitric oxide (ADNO).¹⁴² This ADNO is tonically, and continuously released from vascular endothelial cells¹⁴³ in amounts sufficient to modulate the biological actions that maintain vasodilator tone, inhibit platelet aggregation, leukocyte adhesion, regulate vascular smooth muscle cell proliferation, and other functions.¹⁴⁴

Another significant realization was that the L-Arginine/Nitric oxide pathway¹⁴⁵ is impaired in various advancing cardiovascular conditions such as hypercholesterolemia, atherosclerosis,¹⁴⁶ chronic renal failure,¹⁴⁷ diabetes¹⁴⁸ essential hypertension,¹⁴⁹ congestive heart failure,¹⁵⁰ impotence,¹⁵¹ old age,¹⁵² and others. In simple terms, all of this means that L-Arginine is essential to the recovery from cardiovascular disease and the continuance of cardiovascular health.

Nobel Prize

Researchers realized that the implications of their findings were enormous and over the next decade the evidence for the beneficial

effects of L-Arginine supplementation continued to mount. Multiple simultaneous research projects worldwide repeatedly demonstrated the importance of ADNO as a prototype molecule, a chemical signal in normal physiology.¹⁵³ At last, the scientific world could neglect the discovery no longer and in 1998 Drs Robert Furchgott, Louis Ignarro and Ferid Murad were awarded the Nobel Prize for Medicine and Physiology for their works in relation to this L-Arginine/NO pathway.

In a bit of irony, the Nobel Prize and nitric oxide have another connection. The Nobel Prize itself is awarded in honor of the same Alfred Nobel made famous for his work with nitroglycerin, from which Dr. Murad discovered the release of nitric oxide.

The discovery and understanding of this L-Arginine/Nitric oxide biological pathway is profound. The award has inspired even more studies. Researchers from around the globe are hailing this as one of the most significant discoveries of modern medicine. From Italy, De Caterina has written,

The past 20 years have witnessed enormous progress in our understanding of the biology of vascular endothelium and its role in cardiovascular disease . . . the concept of a continuous regulation of vascular tone by normal endothelium and alterations of such control in disease states has become one of the most enlightening concepts of cardiovascular research.¹⁵⁴

From Israel, Tenenbaum proclaimed that,

This amino acid has reached the medical spotlight. L-Arginine exerts favorable effects in the prevention and treatment of endothelial damage and the restoration of endothelial function in patients with cardiovascular risk factors (hypercholesterolemia,

smoking, hypertension, diabetes and advanced age) or with several chronic cardiovascular disorders (coronary, peripheral and cerebral vascular disease, and mild-to-moderate heart failure).¹⁵⁵

From Cornell University Medical College, Lane acknowledged that,

Appreciation of the role of nitric oxide (NO) in mammalian cell biology has toppled the paradigm that biological signaling is initiated exclusively by noncovalent, lock-and-key-type interactions with receptor proteins. . . . much to the surprise of those who thought that reactive molecules are generated and act only under pathophysiological conditions, . . . NO has emerged as a prototype molecule that signals by chemistry in normal physiology.¹⁵⁶

And from Texas A & M, Wu timidly admits, “Dietary arginine supplementation may represent a potentially novel nutritional strategy for preventing and treating cardiovascular disease.”¹⁵⁷ Thousands of similar articles are published in many major medical science journals, each catalogued in the Index Medicus.¹⁵⁸ The significance of the ADNO pathway is no longer debated, it is only ignored.

After years of unanswered questions, science now knows that nitric oxide has many significant, positive physiological effects. This simple gas with a biochemistry similar to an oxygen radical and once considered a mere pollutant has proven essential to cardiovascular health.^{159, 160}

Some Recent Studies

The following titles—all listed in the prestigious Index Medicus,

the primary index for medical journals—were chosen at random merely to make a point: the allopathic world is well aware of L-Arginine. The L-Arginine/Nitric oxide pathway and its ability to reverse cardiovascular disease is one of the most researched and well-documented topics in medical science. These articles represent a very small portion of a plethora of published scientific studies on the topic of the L-Arginine/NO pathway. In 1998, about 10,000 studies made references to Arginine.¹⁶¹ In April of 1999 there were more than 20,000¹⁶² studies citing such works; by early 2000, more than 30,000 articles; by Mid 2001 more than 53,000 published papers reference Arginine; and today in 2004, there are 62,850 articles.¹⁶³

- *Blood pressure and metabolic changes during dietary L-Arginine supplementation in humans.* Am J Hypertens 2000.¹⁶⁴
- *What we know and don't know about L-Arginine and NO.* Circulation 2000.¹⁶⁵
- *L-Arginine and s-nitrosoglutathione reduce embolization in humans.* Circulation 2001.¹⁶⁶
- *Adhesiveness of mononuclear cells in hypercholesterolemic humans is normalized by dietary L-Arginine.* Arterioscler Thromb Vasc Biol 1997.¹⁶⁷
- *L-Arginine-induced vasodilation in healthy humans: pharmacokinetic-pharmacodynamic relationship.* Br J Clin Pharmacol 1998.¹⁶⁸
- *Randomized, double-blind, placebo-controlled study of supplemental oral L-Arginine in patients with heart failure.* Circulation 1996.¹⁶⁹
- *Dietary L-Arginine supplementation normalizes platelet aggregation in hypercholesterolemic humans.* J Am Coll Cardiol 1997.¹⁷⁰

- *Enhanced endothelial adhesiveness in hypercholesterolemia is attenuated by L-Arginine.* *Circulation* 1994.¹⁷¹
- *Increased endothelium—monocyte interactions in salt-sensitive hypertension: effect of L-Arginine.* *J Cardiovasc Pharmacol* 2000.¹⁷²
- *Oral L-Arginine improves endothelium-dependent dilation in hypercholesterolemic young adults.* *J Clin Invest* 1996.¹⁷³
- *Effects of oral administration of L-Arginine on renal function in patients with heart failure.* *J Hypertens* 2000.¹⁷⁴
- *Arginine nutrition and cardiovascular function.* *J Nutr* 2000.¹⁷⁵

Even this short list makes it quite obvious that this research was not done in a closet. Again, that L-Arginine is a primary substrate for the synthesis of nitric oxide—the endothelium-derived relaxing factor—is no longer debated, it is only ignored.^{176, 177, 178, 179}

Why is it ignored? We know that L-Arginine is the precursor to several essential biological actions; that it is a necessary substrate in the biochemical synthesis of nitric oxide; that its therapeutic application has proven to reverse and even prevent cardiovascular disease. Thus, this makes it a very real threat to the world of western medicine. The American medical community's continued neglect of this research can hardly be without agenda. And it would appear that the agenda is simple self-preservation.

Could this be why Massaro recently predicted that atherosclerotic vascular disease would likely continue to be the main cause of death in western countries.¹⁸⁰ Meanwhile, Mediterranean countries such as Greece and Southern Italy have very low incidence of this slow killer. The important factor is diet.

Cardiovascular disease is an enormous part of the medical

industry. L-Arginine is—if I may borrow a phrase from Tom Clancy—a very “Real and Present Danger” to the world of allopathic medicine. There is much at stake. Stability and status quo are paramount. The medical establishment can ill afford a non-pharmaceutical cure to cheat it of its profits.

Chapter Eight

Hurry up and Take Your Time

That science knows so much about the benefits of L- Arginine and that the medical community continues to neglect it is quite disappointing. In 1999, I told a friend about L-Arginine's ability to lower blood pressure. Because he was being treated for hypertension and, like most subjects suffering the allopathic treatments for this ailment he experienced the dismal side effects of the same, he was very interested in an alternative therapy. I advised him to speak to his physician about it. He did. He asked his cardiologist, who was also his personal friend, what he knew about L-Arginine.

“It could replace every high blood pressure medication on the market,” he answered. When asked if he recommended it to his patients he responded, “No.”

That same month I asked another physician, a retired pathologist,

the same question, “What do you know about L-Arginine?”

“It will replace Viagra,” he told me.

Some time later I asked another cardiologist about L-Arginine. I suspected he, like most physicians, had not been using it. I confess that I was setting him up in the way I asked the question. We were alone, both having arrived a few minutes early for our monthly Critical Care Committee Meeting at the medical center at which we both worked. “How much success have you been having, treating your hypertensive patients with L-Arginine?” I asked.

“I haven’t been using it,” he said.

When I mentioned the research and told him of the success I had witnessed over the last few years of several people effectively lowering their blood pressure with L-Arginine and Omega-3 fatty acid supplementation, he quickly responded, “In combination with which medication?”

When I told him that I was aware of the current studies demonstrating a synergistic effect of L-Arginine in combination with certain hypertension medications, but that these people were not taking it in combination with any drugs and that in fact they had been able to get off their medications altogether, he literally had no response. The conversation was over. He stared at me, speechless, eyes in a daze, as if the information could not be processed.

Physician Neglect

Those few physicians who are aware of L-Arginine are the exception, not the rule. Despite solid documentation and publications galore in several major medical journals, most physicians in my informal survey remain willingly ignorant of the data. And like the cardiologist, most of them who are aware of the research do not recommend it to their patients. Dr. Merrell (coauthor of THE ARGININE SOLUTION) seems to have had a similar experience to

my own.

I have become increasingly impressed that the effects of arginine can be both significant and durable. When I began asking my colleagues who specialize in cardiology, urology, and other fields if their patients were experiencing similar benefits, to my surprise, none of them had ever recommended supplemental arginine, indeed most knew next to nothing about it. They were, to be sure, uniformly well versed in the latest generation drugs, from ACE inhibitors to the so-called statin medications, thanks to numerous articles in their respective medical journals.

What was so surprising to me was that these selfsame, very conservative, mainstream journals were also running articles on NO and arginine.¹⁸¹

I have conducted a similar informal survey among alternative health practitioners and nutritionists. Although each knew that L-Arginine stimulated human growth hormone and some were aware of its immune-system enhancement properties, none was aware of its cardiovascular benefits. However, unlike the allopathic practitioners who stubbornly neglect the information, these alternative health practitioners simply were not aware of the current data. Because the studies have been performed by allopathic researchers and published in allopathic journals, alternative practitioners are basically out of the loop; still, very little is published about the cardiovascular effects of L-Arginine in alternative healthcare literature.

Spinning its Wheels

Even more disturbing than allopathy's neglect of holistic therapies is its neglect of its very own research. Although medical scientists have known the key to controlling, even correcting, cardiovascular disease for nearly two decades, still it remains a secret

to both the clinicians and their victims . . . I mean patients. In their ignorance physicians continue to jeopardize their patients' health with harmful prescriptions laden with side effects. It is not without reason that the Institute of Medicine released a report on March 1, 2001, proclaiming the nation's health system was a tangled maze in urgent need of a major overhaul.

One of their primary objectives is to get physicians to follow scientific evidence. Although scientists have developed very effective treatments for several diseases, the Institute admits that too many Americans get inadequate, outdated and even unsafe therapies. They reported that it can take seventeen years for important medical discoveries to become accepted and used by physicians.¹⁸²

There are numerous reasons for this dearth of scientific information and for physician failure to employ what scientific data they do understand. One of the most prominent is simply physician arrogance. As Epictetus observed some 2,000 years ago, "It is impossible for anyone to begin to learn what he believes he already knows."¹⁸³

Another issue is merely aversion to change. On the other hand, research scientists are trained to question accepted beliefs and to affect change. As the knowledge of physics, chemistry and the human body grows, wonderful new discoveries often invalidate old traditions. Then the scientists face the ominous task of convincing the clinicians of their findings. This can prove more labor-intensive than the experiments that lead to the discovery. To this regard, Joe Nichols, MD, recalls a statement made to his classmates by his professor at the University of Arkansas Medical School. "Never be the first to take up the new, nor the last to discard the old."¹⁸⁴ He confesses, "It made a deep and lasting impression."

It can take years and thousands of additional studies before clinicians accept and begin to employ these new truths.¹⁸⁵ That a discovery may have enormous curative potential seems of little

concern to the modern physician. Dr. Fried (coauthor of *THE ARGININE SOLUTION*) has reminded us of a couple situations that illustrate this behavior.¹⁸⁶

Medicine's aversion to change was recently demonstrated when Dr. Stanley Prusiner became interested in certain devastating brain diseases during the early 1970s. He realized there were common traits between the neurological disorders of Creutzfeldt-Jakob disease, mad-cow disease in cattle and other similar rare brain disorders including kuru—which is found in the Fore Highlanders of Papua, New Guinea, who honor dead tribesmen by eating their brains. Although the accepted wisdom was that these related conditions were merely neurodegenerative disorders, Dr. Prusiner demonstrated that the nerve degeneration was actually due to an infection caused by tiny protein particles lacking DNA. He called them prions. But it took the medical community almost two decades to finally acknowledge his discovery. After suffering years of ridicule and the contempt of his peers, Dr. Prusiner was finally awarded the Nobel Prize in Medicine and Physiology in 1997.

The case of established medicine versus Dr. Kilmer McCall is even more bazaar. In 1969, this already highly acclaimed research scientist discovered that a blood-borne protein metabolite called homocysteine was a primary factor in the development of atherosclerosis. Rather than viewing this as a major breakthrough by one of its brightest research scientists, the medical community scorned Dr. McCall into near obscurity. In 1997, after nearly three decades of rejection his research was finally accepted and published.¹⁸⁷

Is medical science obtuse? Is it so willfully ignorant? Is it so afraid of change that it must spurn every advancement? Is it so unsure of itself that it rejects even its own research? Seemingly, yes. According to Dr. Atkins the rejection of clinical findings “happens thousands of times a decade.” A doctor discovers a new treatment

and tries it on many patients with great success, only to have it rejected by his peers. He believes “only a handful of these discoveries make it into mainstream medicine.”¹⁸⁸

Still clinical medicine has an infatuation with research: case studies, cohort studies, prospective studies, blind and double blind studies. There can never be too many studies. Indeed, more studies have already begun. The 21st Century Research Fund, proposed by President Clinton in 1998, has provided a dramatic increase in biomedical research funding for the National Institutes of Health (NIH). The NIH budget inflated to \$20.3 billion for fiscal year 2001, a 14% increase over the 2000 budget and nearly double the \$10.3 billion budget of 1993. These new funds have generated a record number of grants in essential biomedical research to prevent and combat diseases such as Alzheimer's, AIDS and cancer.¹⁸⁹ However, even if research is successful, one must wonder who will put the discoveries to use? And when?

It is most curious that medicine thrives on research yet physicians are so very slow to make use of the data. No, this thought must be modified. Medicine seems only to drag its feet in the implementation of new procedures or discoveries that are non-pharmaceutical. No, even this must be restated. Medicine seems only to drag its feet in the implementation of new procedures or discoveries that are non-new-pharmaceutical. While new synthetic pharmaceuticals can be tested, FDA approved and put into clinical practice in less than 12 months, pulling these same pharmaceuticals from the market for consumer protection, or using harmless non-pharmaceuticals or a new application for non-new-pharmaceuticals will take many years and thousands of studies before becoming accepted as common clinical practice.

Such is the case with the treatment for the common peptic ulcer. An Australian pathologist, Dr. Barry Marshall had known since the early 1980s that stomach ulcers were caused by a bacterial infection

rather than stress and excessive stomach acid as medicine had taught for many years. Having treated many patients, he also knew these peptic ulcers could be cured with specific antibiotic therapy. Like many researchers throughout history, he used himself as a human guinea pig to prove his point. By ingesting a special concoction contaminated with the offending bacterium, *helicobacter pylori*, as expected he promptly developed the ulcer. Despite his success in causing and treating the ulcer it took nearly twenty years before the medical establishment stopped ridiculing the evidence, acknowledged the discovery and finally began implementing the cure, a simple antibiotic.¹⁹⁰

Such is also the case with arginine-derived nitric oxide and the beneficial effects of L-Arginine. Even by clinical medicine's standard of slow progress, this research has far exceeded its coming out. Discoveries and scientific papers that began more than two decades ago have virtually revolutionized scientists' understanding of the cardiovascular system. Presently cited in more than 53,000 journal articles and the topic of the 1998 Nobel Prize in Medicine and Physiology, it is hailed as one of the most significant cardiovascular discoveries in modern medicine with enormous clinical implications.¹⁹¹ But as medical history might predict, still L-Arginine remains unnoticed and unused by the American medical community.¹⁹²

Chapter Nine

The Historical Development of L-Arginine and Nitric Oxide

Nitric oxide molecules last only a few seconds, but they have potent and essential affect with the beneficial effects well documented. Blind and double blind studies, cohort and perspective studies all performed by allopathic researchers continue to confirm the importance of the L-Arginine/Nitric oxide pathway. To date, three kinds of isoenzyme have been discovered. Each part of an ADNO pathway in a different part of the body affecting different biochemical actions. One occurs in the brain where ADNO is believed to be responsible for encoding long-term memory. A second occurs in the immune cells to produce ADNO for use as an antioxidant. The third, the focus of this report, occurs in the

endothelium to regulate vessel relaxation and overall vascular tone.¹⁹³
The story of nitric oxide dates back to the mid 1800s.¹⁹⁴

- Following the initial work of Theophile-Jules Pelouze, in Turin 1847, Ascanio Sobrero discovered that even minute quantities of nitroglycerine (NG) on the tongue produced violent headache.
- In 1849, Constantin Hering tested NG on healthy volunteers and noticed the same effect with such precision that he pursued it as a homeopathic remedy for headaches based upon the “Law of Similars.”
- Alfred Nobel joined Pelouze in 1851 and soon discovered another potential for NG. By the mid-19th century, British scientists had also taken interest in this amyl nitrite. They recognized it as a powerful vasodilator and it soon entered British Pharmacopoeia as a remedy for hypertension.
- In 1867, Lauder Brunton, considered to be the father of modern pharmacology, used the compound to relieve angina. Brunton noted a resistance to repeated doses that would prove quite significant to later industry workers.
- Interestingly Alfred Nobel, who suffered from acute angina, refused to use NG to treat his condition. But he did begin to manufacture and market it as a powerful explosive. This developed into a flourishing industry that lasted throughout the 19th century and well into the 20th.
- During the 1900’s, many workers were exposed to very high levels of organic nitrites that caused a phenomena of nitrate tolerance. It was identified by the onset of “Monday disease” and nitrate withdrawal overcompensation—identified by “Sunday Heart Attacks.”

The Endothelial-Derived Relaxing Factor

Although little progress was made toward understanding the cellular mode of action during the early 20th century scientists continued to study in vitro actions of various nitrate-containing compounds. Then, a series of discoveries by several scientists that began in the late 1970's would change the understanding and treatment of cardiovascular disease.

- In 1977, Dr. Ferid Murad discovered two amazing things: nitric oxide (NO) was released from NG and NO had specific actions on vascular smooth muscle. But this generated more questions than it provided answers.
- In 1980, Dr.s Robert Furchgott and John Zawadzki realized the endothelial importance in acetylcholine-induced vasorelaxation.
- By 1987, Dr.s Louis Ignarro and Salvador Moncada had identified the endothelial-derived relaxing factor (EDRF) as nitric oxide. The mystery was beginning to come together. Behaving like a neurotransmitter, NO serves as a signaling molecule for the cardiovascular system, thereby modulating various flat muscle functions.¹⁹⁵ It affects vessel relaxation, vasodilation and systemic vascular pressures to shunt blood throughout the body,^{196,197} they realized that NO is a universal signaling molecule involved in the inflammatory response, apoptosis¹⁹⁸ and protection against atherosclerosis.¹⁹⁹

Arginine-Derived Nitric Oxide

Researchers had simultaneously recognized L-Arginine's essential role. As the physiological precursor to the biological action that produces NO,²⁰⁰ L-Arginine combines with the isoenzyme endothelial nitric oxide synthase (NOS or eNOS)²⁰¹ to form a molecule called arginine-derived nitric oxide (ADNO).²⁰² Arginine-derived nitric oxide is tonically and continuously released from

vascular endothelial cells²⁰³ in amounts sufficient to modulate the biological actions that maintain vasodilator tone, inhibit platelet aggregation, leukocyte adhesion, vascular smooth muscle cell proliferation²⁰⁴ and other functions. Researchers also realized that this L-Arginine/Nitric oxide pathway²⁰⁵ is impaired in various advancing cardiovascular conditions such as hypercholesterolemia, atherosclerosis,²⁰⁶ chronic renal failure,²⁰⁷ diabetes²⁰⁸ essential hypertension,²⁰⁹ congestive heart failure,²¹⁰ impotence,²¹¹ old age,²¹² and others.

- By the mid 1980s, Murad, Furchgott, Zawadski, Ignarro, Moncada, Palmer, Higgs and others had performed numerous studies and published several important articles concerning the syntheses and significance of ADNO.
- No doubt anxious to get the word out, in June of 1988, Palmer et al published articles in two journals: one titled Vascular endothelial cells synthesize nitric oxide from L-Arginine,²¹³ the other L-Arginine is the physiological precursor for the formation of nitric oxide in endothelium-dependent relaxation.²¹⁴ They stated that, “Nitric oxide (NO) released by vascular endothelial cells accounts for the relaxation of strips of vascular tissue and for the inhibition of platelet aggregation and platelet adhesion attributed to endothelium-derived relaxing factor. . . . L-Arginine is the precursor for NO synthesis in vascular endothelial cells.”
- In January 1989, Palmer and Moncada published another important article, this one titled, *A novel citrulline-forming enzyme implicated in the formation of nitric oxide by vascular endothelial cells*. They demonstrated that the enzyme was soluble, dependent upon the coenzyme NADPH and inhibited by the L-Arginine analogue NG-monomethyl-L-Arginine (L-NMMA).²¹⁵ L-Arginine and L-NMMA (or other L-Arginine analogues) soon became the subject of even more studies.

- By 1990 Dr. Furchgott was providing lectures on L-Arginine and NO's important role in the maintenance of vascular tone. That year Moncada published *The first Robert Furchgott lecture: from endothelium-dependent relaxation to the L-Arginine:NO pathway*.²¹⁶ In these lectures Furchgott reported that, "Nitric oxide (NO) is released from vascular endothelial cells and fresh vascular tissue in amounts sufficient to account for the biological actions of endothelium-derived relaxing factor. It is synthesized from the terminal guanidino nitrogen atom(s) of L-Arginine, a process that is inhibited by NG-monomethyl-L-Arginine (L-NMMA). Studies using L-NMMA have shown that NO is constantly generated by the vessel wall to maintain vasodilator tone. The L-Arginine: NO pathway has now been identified in a number of other cells and tissues, in many of which it acts as the transduction mechanism for stimulation of the soluble guanylate cyclase."
- Then in October of 1991, Bogle et al²¹⁷ reported another very significant factor. Contrary to the expectation that reactive molecules would generate only under pathophysiological conditions such as ischemia or reperfusion injury, they demonstrated a concomitant increase in the transport of L-Arginine into endothelial cells during agonist-stimulated nitric oxide production.

Bogle had proved a continual generation of nitric oxide exists within the cardiovascular system. The puzzle was complete and provided even stronger evidence for treating vascular dysfunction with L-Arginine supplementation. Current research in this area is based on these findings and many new papers introduce their studies by acknowledging this foundation. Jiang et al²¹⁸ introduced their research in this manner.

Nitric oxide synthase (NOS) catalyzes nitric oxide (NO) formation from L-Arginine in the

presence of molecular oxygen and NADPH. NO is involved in the regulation of microvasculature. Isosorbide dinitrate (ISDN) and glyceryl trinitrate (GTN) have been widely used as vasodilators to treat acute myocardial ischemia, their biological effects being due to the release of NO. . . .

Wu et al²¹⁹ also recognized a variety of important issues as established knowledge.

L-Arginine (Arg) is the substrate for the synthesis of nitric oxide (NO), the endothelium-derived relaxing factor essential for regulating vascular tone and hemodynamics. NO stimulates angiogenesis, but inhibits endothelin-1 release, leukocyte adhesion, platelet aggregation, superoxide generation, the expression of vascular cell adhesion molecules and monocyte chemotactic peptides, and smooth muscle cell proliferation. Arg exerts its vascular actions also through NO-independent effects, including membrane depolarization, syntheses of creatine, proline and polyamines, secretion of insulin, growth hormone, glucagon and prolactin, plasmin generation and fibrinogenolysis, superoxide scavenging and inhibition of leukocyte adhesion to nonendothelial matrix. . . .

Mattei et al²²⁰ speak to the dysfunctional vascular system.

Endothelial dysfunction has been documented both in the forearm and coronary beds of essential hypertensive patients. Impairment in the tonic release of nitric oxide (NO) is secondary to hypertension, while the alteration in agonist-induced endothelium-dependent vasodilation seems to be a primary defect caused both by an alteration of the L-Arginine-NO

pathway and the production of cyclooxygenase-dependent EDCFs, such as prostanoids or superoxide anions. . . .

Similarly Koglin et al²²¹ acknowledged the foundation of previous vascular dysfunction studies and L-Arginine's role in the treatment of the same.

Functional studies in human transplant recipients have documented endothelial dysfunction of coronary artery vessels. Administration of L-Arginine, the precursor of NO, improved endothelial function of both epicardial coronary arteries and coronary microvasculature indicating a protective effect of NO.

Entrepreneurs

Although clinicians remain uninformed about L-Arginine, the pharmaceutical companies know all about it. As the industry's secret slowly leaks to the public, drug companies—always the entrepreneurs—are working hard to offset the coming L-Arginine revolution. Research and Development departments are frantically trying to design sub-products or even new products to address the various biochemical actions that L-Arginine sets in motion. In short, as Dr. Fried points out, rather than simply telling the world of L-Arginine's potential they hope to make a profit from heart disease, stroke, cancer, rheumatoid arthritis, impotence and any other disease it may affect.²²²

Knowing that physicians very much desire to prescribe synthetic pharmaceuticals, a creative study was published in the October 2000 edition of the *Journal of Cardiovascular Pharmacol Therapy*, titled *Captopril and L-Arginine have a synergistic cardioprotective effect in ischemic-reperfusion injury in the isolated rat heart.*²²³ Rather than objecting to the positive outcomes provided by L-Arginine, this study suggests that a combination of the ACE inhibitor Captopril and L-

Arginine has a synergistic, protective affect on heart function and coronary flow that may be mediated by enhanced NO production.”

Drs Fried and Merrell speak to the success that certain pharmaceutical Laboratories have realized from L-Arginine research.²²⁴ Viagra, the popular medication for treating male impotence, is specifically designed to capitalize on the vasodilation effects of L-Arginine. I should think that early on at least three things must have been evident to the developers of this drug. L-Arginine corrects impotence. But L-Arginine is a simple amino acid and can not be patented. Nevertheless, somehow a profit must be made from this knowledge.

L-Arginine is an important step in the biochemical chain reaction leading to erection. Drs Fried and Merrell explain that once this process was better understood the opportunity was seized. A substance was created to inhibit a particular step in this lengthy cause and effect biochemical sequence. They have described it thus:

Stimulation ⇒ nerves start firing ⇒ neurotransmitter acetylcholine is released ⇒ endothelium cells release NOS combining with arginine to form ADNO ⇒ the enzyme cyclic GMP—a potent vasodilator, is released ⇒ phosphodiesterase—an enzyme that begins to destroy the cyclic GMP is released in a lesser quantity.

Post climax or post stimulation ⇒ nerves stop firing ⇒ release of neurotransmitter acetylcholine stops ⇒ endothelium cells stop releasing NOS ⇒ release of cyclic GMP stops ⇒ phosphodiesterase continues to destroy cyclic GMP until depleted.

The pharmaceutical company simply designed a drug to block the enzyme, phosphodiesterase. As long as the drug is in the system the cyclic GMP is allowed to accumulate and vasodilation occurs.

Given the fact that L-Arginine supplementation is known to correct both the hypertension and the impotence is it ironic or atrocious that a drug was created to address a largely iatrogenic (doctor caused) problem created by hypertensive drugs? I vote for atrocious.

In 1998, Dr. Fried suggested that it was only a matter of time before it becomes public knowledge that L-Arginine is effective and safer than Viagra.²²⁵ Indeed today, several years later there are over-the-counter L-Arginine based products on the market to treat impotence.

Chapter Ten

Battle of Beliefs

The conflict has been around for years—this conflict between allopathy (modern western medicine) and other, holistic, medical philosophies often referred to as alternative or traditional healthcare. The battle is as old as modern allopathy itself—basically, about 150 years.

Opposing Belief Systems

For thousands of years physicians had held a holistic view of health and healthcare, wherein the body was considered a single unit—each organ or body system necessarily affecting other body systems and consequently the whole body. Then in the 1600s the

early works in physics, chemistry and pathology paved the road to allopathy. With the advent of advanced pathological techniques came the ability to provide a more technical approach to medicine. It became possible to isolate body parts, to dissect and perform micro-examinations on organs and body systems, which lead to a better understanding of the function and the disease processes of each.

The more advanced these techniques became, the more artificial methods were devised to micro-manage and manipulate each organ and body system. With each new method allopathy grew further estranged from viewing the body as a whole unit and from the holistic philosophies of health. The tension between the two philosophies increased rapidly, as did the bitter competition for patients. But it was not until the early 1900s that allopathy was launched into its present popularity and legislatively mandated dominance.

Although the two systems seem to tolerate each other a little more cordially today than they did a century ago, little has changed. If anything, the philosophical divide has grown even wider. While holistic systems still see the body as a unit, allopathy has grown increasingly fragmented with most medical doctors actually specializing in the treatment of a specific organ or body system. That their therapies often and ignorantly neglect other organs and body systems is of little or no concern to an institution mesmerized by laboratory findings and the tabulation of endless and generally meaningless data.

Some modern allopathic physicians seemingly try to incorporate select alternative healthcare methods (such as nutrition and lifestyle) into their practice, but mostly their efforts are necessarily futile. Ultimately the two philosophies can never fully unite, for they are diametrically opposed to each other, even mutually exclusive—one relying upon natural therapies and the other upon artificial. In the holistic philosophy the body is a living being, dependent upon other

living organisms for its sustenance and health. Allopathy however, believes that synthetic substances can bring health and even cure metabolic disease. This difference is far more significant than many want to acknowledge.

Arthur L. Murphy, MD, has acknowledged in the *Story of Medicine* that allopathy does not agree with the holistic view of the body as a unit. Speaking of the holistic physician, Hippocrates—whom even allopathy considers the father of medicine—Murphy says, “To Hippocrates all diseases were general; they affected the body as a whole; therefore studying the varied tissues and structures of the organism was to little purpose. A faulty belief, this, as were many others he held. But a poor working basis is better than none.” Although Murphy rejects the holistic concept of health he concedes that Hippocrates “made theories and what if many were wrong, the accuracy of his practical conclusions are all the more remarkable.”²²⁶ What Murphy seemingly refused to entertain is that perhaps Hippocrates was right and allopathy is wrong, and that perhaps this is why Hippocrates had better outcomes than does allopathy.

A primary belief of Hippocrates, as with all holistic physicians, is that nutrition is paramount to health. But regardless of the current patronage by some allopathic physicians allopathy is not comfortable with the holistic concept of health based on nutrition. Woodson Merrell, MD, professor of medicine at Columbia University College of Physicians and Surgeons and executive director of the Beth Israel Medical Center’s, Center for Health and Healing has pointed out that, “for many in the medical field, nutrition continues to occupy a back seat in their awareness. Maybe a treatment based on nutrition can never hope to achieve the same fanfare as a drug that’s often heavily promoted.”²²⁷

Certainly, this is an accurate assessment and there is good reason for this mind-set: a history, a tradition and a philosophy that need to

be exposed. Understanding these dynamics will answer many questions as to allopathy's continued neglect of nutrition and adamant opposition to holistic philosophies in general. Ultimately, for its own survival, the allopathic community cannot accept holistic methods, including nutrition, because the implications are too threatening. For if nutrition and holistic methods work then allopathic methods, which rely on synthetic substances and coerced intervention, are not necessary. Yet herein lays the power and perceived value of allopathy. Stripped of these artificial therapies and invasive procedures it loses its significance; it loses its very purpose for existence. Consequently, allopathy has a decided opposition to anything that suggests a cure can be achieved without prescription drugs or heroic intervention.

Rational Verses Empirical Data

Another aspect of allopathy is its philosophy of rationalism and its demand for laboratory verification of every outcome. Holistic systems on the other hand are empirical—they are willing to accept therapies based simply on known clinical outcome. An obvious yet overlooked problem with allopathy's demand for laboratory verification is that the human body is not a laboratory. As simple as it may seem the human body is very complex, consisting of innumerable interactions by combinations of hundreds of nutrients and biochemical substrates, as well as deficiencies thereof. Therefore, each body responds slightly differently from the other. Given the countless possible real time biochemical conditions created by various deficiencies and degrees of deficiencies, exact laboratory duplication of everyone's response to any of these nutrients or to any synthetic substance—as is the vogue of allopathy—is ultimately not possible. These real life factors necessarily skew allopathy's laboratory data—a fact that is easily demonstrated by their endless

contradictory studies. No matter what study you read it seems there is always another to prove it wrong.

Does this mean that laboratory data is worthless? Certainly not. Such data can provide valuable evidence as to the general biochemical reactions of certain nutrients and substances in generalized conditions; but to rely on such laboratory evidence as the ultimate authority to govern every individual's biochemical circumstance is absurd. Yet this is exactly what allopathy does when they dismiss proven clinical outcomes that have not been scrutinized by scores of double blind studies, which by the very nature of their subject cannot achieve what they are meant to do—that is, eliminate all variables.

Common Ground

But there is some common ground, slight as it may be, between the two systems. Both allopathy and holistic philosophies agree on basic cytology: that cells are bathed in a nutritional extracellular environment and that potential invaders (bacterium, fungi, virus, carcinogens, etc.) are ever present, lurking, seeking opportunity to attack. But here the two philosophies part company—each having different answers to the fundamental questions of: How do these invaders strike? How do we defend against them? And how do we repel them once they have invaded? It may sound trivial but the schism is deep with diverse and far-reaching implications.

The fundamental theory of allopathy is one of intervention and heroics. The invaders must be killed, inhibited or excised. After a differential diagnosis a cure is prescribed: a medication, radiation, surgery, etc. What evoked this cellular invasion is of little or no concern. The primary issue is to get rid of the invader. Because of its fundamental philosophy, allopathy relies heavily upon synthetic

drugs to inhibit or in some way alter the body's natural biochemistry. Accordingly, Benjamin Rush—the famed professor of medicine at the University of Pennsylvania from 1769 to 1813, taught that physicians must use “powerful and painful remedies in violent disease.”²²⁸ This philosophy has not changed.

Conversely, holistic philosophies—as practiced by botanical medicine, naturopathy and homeopathy—believe these same invaders have taken advantage of the cell's weakened defense system. A defense weakened by an imbalanced or deficient supply of necessary micro-nutrients within the cellular environment. Barring exceptional circumstances, this philosophy believes that cells necessarily have the ability to defend against these invaders. But they must be supplied the proper nutritional ammunition to accomplish the task.

Political Maneuvers

During the 1800's the struggle between these philosophies and for the patient population, grew quite heated. This new field of license allopathic practitioners was growing and although botanical medicine and naturopathic practitioners were present, homeopathic physicians were also licensed and therefore posed a significant threat. In 1846, two years after the American Institute of Homeopathy was founded, the American Medical Association (AMA) was established, largely to compete with homeopathy. A series of events and shrewd political transactions transpired throughout the latter part of the 1800's and early part of the 1900's that, politically and culturally, virtually brought homeopathic and other holistic systems to their knees. Simultaneously these maneuvers—none of which were medical or scientific in nature—exalted allopathy to its present, albeit ill-gotten fame and glory.

To meet the immediate demand during the Civil War allopathic

surgeons, who had previously prepared their own medicines, began using the pre-concocted products of the newly established pharmaceuticals companies whose subsequent post war prominence proved to be a demonstration in marketing genius. These young companies grew rapidly with traveling sales representatives riding the circuit—informing and educating local physicians of the latest compounded miracles at their disposal. As Dr. Atkins points out, for many physicians the “drug salesman became the key method of staying up with medical research.”²²⁹

Seemingly overnight allopathic practitioners and drug manufacturers developed an inseparable bond. With drug stores popping up all across America, doctors could simply send their patients to the local druggist with a prescription. If the druggist did not have a prepackaged product available he would simply concoct what the doctor had ordered. To this day the bond has not weakened. Drug reps and drug advertisements are still the physician’s primary means of continuing education and the drug industry at large virtually controls the medical profession.

Just after the turn of the century, with the struggle between allopathy and holistic methods at its climax, the Flaxner Report—sponsored by the Carnegie Foundation in association with the AMA—provided a supposed critical evaluation of the country’s medical schools. The results, released in 1910, kindled a number of significant changes in clinical medicine. Two were particularly important to the expansion of the allopathic agenda and the eventual demise of holistic teachings. As might be expected, the report strongly favored the allopathic schools of its AMA sponsor and gave very poor reports on the non-AMA homeopathic schools. As a result, the bulk of the funds from the coveted Rockefeller grants were given to the allopathic schools while the homeopathic schools went without.

Even beyond the money, which was crucial, the report had

another potentially more significant result. Understanding this is key to understanding the staunch, aggressive opposition that allopathy still holds toward other medical philosophies—including nutrition.

Before the report, medical schools were small, unregulated and often less than academic. The Flaxner Report had acknowledged this dearth of academia as a nationwide problem and therefore recommended that medical training be moved to the universities and given “a proper theoretical foundation.”²³⁰ However, as Harding observed some twenty years later in a 1929 article, this move to the universities brought very little change or improvement to the non-academic climate of medicine.

Medicine, as a profession, is not distinguished for the high mentality of its members. Anyone can easily point out exceptions to this statement, but—all due respect to them—the run of the medical school mill does not show many exceptionally brilliant individuals. Their average intelligence is lower than that in perhaps any profession . . . and physicians of standing have publicly acknowledged this in commenting upon intelligence testing as applied to doctors.²³¹

What had transpired however was a universal medical education that followed the rational, interventional methodology of allopathy and which dogmatically opposed the empirical methods of holistic philosophies. And now that it was nominally associated with the universities the allopathic philosophy became chiseled in stone. Its anti-holistic, even militant mind-set was galvanized into each student; blind faith in the philosophy of heroic intervention was demanded. Any physician who broke rank did so at great expense. Those who dared even to consult with homeopaths were shunned by their peers, ostracized and often expelled from their medical societies.^{232,233} Even

as recent as the late 20th century those who actually prescribed alternative, non-allopathic therapies did so at the risk of losing their license to practice medicine.²³⁴

To this day the battle is waged on many fronts. Medical colleges are still dogmatically opposed to holistic philosophies. Nutrition is still not a part of the average medical education. Allopathic physicians tell their patients to avoid natural remedies. Drug manufacturers do all they can to block the sale of natural items. Even legal battle lines have been drawn.

One of the most persistent and effective battlegrounds is in the media. Allopathic naysayers frequently write manipulative attack articles—often called white papers within the industry—which are designed to spurn alternative therapies. Generally written by a member of the medical specialty that is economically threatened by the innovative technique,²³⁵ these editorial analyses are published in prestigious medical journals with the express purpose of dissuading their readers from further investigating certain alternative therapies. Their readers, physicians already brainwashed by the allopathic system, accept these articles as if they are Holy Scripture. For allopathy, these medical journals are the final authority. They stand above intuition, above personal experience, above proven clinical outcome, even above reason.

Some of these white papers are so extreme that in pursuit of their agenda they actually defy logic. For example, a recent article published in a major surgery journal actually questioned the necessity of good micronutrients for the critically ill. Although the author admitted that, “critically ill patients are hypermetabolic and have increased nutrient requirements,” he also argued that it is only “assumed that nutritional support is beneficial for these patients.” He said, “There are no well designed clinical trials to test this hypothesis.” And although “the administration of specific micro-

nutrients and specialized supplements has attracted attention . . .” the studies are “limited because of poor study design.”²³⁶

Although this author could not be more incorrect about the nature and number of well-designed clinical trials proving the importance of micronutrients for the critically ill, still the article was published. One must wonder what the research scientists at the Mayo Clinic²³⁷ and the Shriners Burns Hospital²³⁸ thought of this attack article. Obviously it had blatant disregard for their works, which methodically proved the necessity of such nutrients. Even spokesmen from the prestigious Harvard School of Public Health have timidly admitted that such nutrients play a significant role in a patient’s recovery.²³⁹

Considering the vast scientific documentation and the intuitive logic that people need to eat it is amazing that anyone, especially a physician, would argue against the importance of nutrition for the ill. It is amazing that is, if one does not understand the allopathic mindset and its philosophical aversion to any method of healing other than rational intervention with synthetic substances.

The Religion of Allopathy

Although few members of this fraternity ever admit it, allopathic medicine is a belief system indoctrinated with and directed by the circular logic of tradition. Some within the industry have even referred to it as the medical priesthood.²⁴⁰ Robert Atkins, MD, has made the charge that,²⁴¹

Orthodox medicine has entrenched itself within a formalized structure that is surprisingly codified. Centered around the teaching hospital, this structure includes ritual, pomp and ceremony, a hierarchy, a belief system, and a profound faith in those beliefs. It

is very like a religion.

.....

But as a religion it promotes a blind emotional attachment to its tenets and, consequently, a blind antipathy to what it perceives as heresy. As in a strong church, anything that is not orthodox is heretical.

Not unlike most religions, medical orthodoxy believes in proselytizing the uncommitted. In this endeavor it has succeeded, and most of the general public has been converted to its beliefs.

For this reason, a significant number of physicians are jumping ship. Having realized the futility of the allopathic philosophy and the ineffectiveness of synthetic drugs for attaining or sustaining health, they have converted to the forbidden holistic philosophy. Robert S. Mendelsohn, MD, was one such defector.

What makes Dr. Mendelsohn's defection so painful to allopathy is that he was not just one of their own he was a leader in the field. A medical authority with significant influence who served as the National Medical Director of Project Head Start, Chairman of the Medical Licensure Committee of the state of Illinois, Associate Professor at the University of Illinois Medical School, and Director of Chicago's Michael Reese Hospital. Yet, after decades of clinical practice and leadership in the medical community, he concluded that modern medicine is "neither an art or a science. It's a religion."²⁴² A religion, in which he confessed he no longer had faith.

Allopathic medicine is not and never has been an exact science. It is a never-ending experiment and we, the public, are its research subjects. Decades ago Harding expressed his amusement at the AMA for posing as a scientific avenger and working itself into a perfectly

self-righteous wrath to debunk what it called “quack healing.” What he found so amusing was that approximately half of the drug therapy in his day employed by the ordinary physician and advertised in their most respected journals, as he put it “is of the quack quackery in so far as it involves the dosage of human beings.” After very imperfect diagnoses the doctor routinely prescribes “simple or compound medications or agencies of unknown physiological effects (or perhaps lacking any at all) upon human organisms.” He found it comical that physicians want to be considered as scientists yet they experiment in a manner that the trained laboratory worker and research investigator would consider empiric in the extreme. Although research investigators and scientists would not think of experimenting upon even so simple an organism as a rat unless they had it under rigid control, the physician experiments “upon complex human beings with their intricate idiosyncrasies and environmental differences while he has his experiential animals under vary imperfect control indeed.”²⁴³

Although Harding wrote this in 1929, ample evidence shows this practice has not changed. For example, about 22,500 heart attack victims in the United States receive the wrong dose of clot-busting drugs every year resulting in some 1,500 deaths.²⁴⁴ According to Darrell Abernethy, MD, PhD, Clinical Director of the National Institute on Aging,²⁴⁵ “adverse events related to drug therapy continue to be a common” among nursing home residents. And a recent article in the *Journal of Healthcare Management* reported that incorrect physician orders account for 56% of all medication errors.²⁴⁶

Even if we accept the premise that allopathic medical research is based on sound science (a premise I am not willing to concede), clinical allopathic medicine is by no means scientific. It is a tradition, a belief system. And it is a philosophy that many of its once committed practitioners have abandoned. Indeed, it is quite telling that although many allopathic physicians have converted to the

holistic philosophy, to my knowledge, there are no holistic practitioners who have converted to the allopathic philosophy.

At its best medicine is a wonderful institution. Every year an untold number of lives are significantly changed by brilliant techniques for orthopedic surgery, sight restoration, cleft palate repair and the like. And I marvel at the heroic procedures that cheat death: emergent vascular repair or the repair of gross wounds caused by violent trauma, and the ability to dissolve blood clots or breathe for those temporarily unable to do so for themselves. It is truly awesome. And I stand in reverence to the men and women who devote their lives to learning and perfecting these important skills. On the other hand, while select procedures can work wonders in certain situations allopathy knows very little about and does even less for achieving or maintaining health. Its synthetic medications simply cannot cure or even positively affect metabolic disease; yet ironically, this is the mainstay of its financial success. Heroic procedures? Yes. Health? No. Health is simply not the forte of allopathic medicine.

Stuart Berger, MD, sheds light on the typical procedure-oriented medical education by recalling his own. It might give pause to consider that he trained at some of the most prestigious institutions in the country: New York's University Hospital, the psychiatric wards of Bellevue Hospital, Tufts Medical School and Harvard School of Public Health.

The system believed it was important that we know how to drive a sharp, hollow needle (trocar) into a person's living chest without anesthetic in ten seconds in an emergency room, but never taught us how to help our patients live so that they would never be brought into that emergency room. We learned how to use scalpels, deadly drugs, and radiation beams to destroy cancer, but not how the right foods

and life-styles could help prevent cancer in the first place.”²⁴⁷

I caution the reader to beware. Our society, which is easily persuaded by charisma and grandiose promise, has been exploited, coerced by a series of shrewd legislative maneuvers to convert to the religion of allopathy. To minimize defectors we are duped—literally doped by the allopathic drugs, which are virtually forced down our throats. But this mass, coerced conversion does not make allopathy a superior or even effective medical philosophy. It does however, speak to a very powerful lobbying voice in Washington—the voice of the movers and shakers of allopathic medicine, the voice of the pharmaceutical industry.

PART THREE,

**Priority # 3, Conceal All Clinical
Findings That Do Not Promote
the Accomplishment of Priority #1**

Chapter Eleven

Side Effects, The Benign Cost of Allopathic Treatment

I am no longer amazed at the number of inquiries I receive from traditional allopathic healthcare workers who seek alternative methods to control their hypertension. Like so many others, they too have grown weary of the significant, life altering side effects of the popular pharmaceuticals.

Hypertension

Although the number of deserters is growing, far too many hypertension victims still assume there is no treatment other than traditional pharmacology. Like a jury directed by the judge to dismiss solid evidence because of a technicality many hypertensive

patients bypass alternative therapies and follow their physician's pharmaceutical prescriptions to the letter. As a result, they unnecessarily suffer as the unwitting victims of the allopathic cost of cure.

Even more do not realize they harbor this silent killer. Of the estimated 50 to 60 million Americans who are known to suffer hypertension only about 19 million are being treated with medication. Of these, some 34% do not take their medication because of the side effects.²⁴⁸ No doubt a considerable number purposefully ignore their symptoms, convincing themselves they are in no harm. But hypertension did not earn its nickname in vain. Left untreated it will lead to serious medical problems including kidney failure, heart failure and stroke. In time, its toll is inevitable, as evidenced by some 33,000 untimely deaths each year.²⁴⁹

What is so disturbing about hypertension is that it need not exist. That is, it need not exist as a national health problem costing thousands of lives and billions of dollars every year. Discounting the ill-advised pharmaceutical remedies, there are very effective alternative therapies to correct this disorder.^{Appendix B} But they are seldom employed by allopathy.

Allopathic pharmacopoeia has several treatments for hypertension: diuretics, beta-blockers, alpha antagonists, calcium antagonists and angiotensin converting enzyme (ACE) inhibitors.²⁵⁰ But as noted by Claude Lenfant, MD, Director of the National Heart, Lung and Blood Institute, current approaches are "less than optimal."

Benign Side Effects

Even to say these therapies are not without price is an understatement. Depending upon the medication or combination of medications, users might experience skin rash, photosensitivity, headache or electrolyte imbalances. Some of these medications increase the risk of breast cancer²⁵¹ or cause hypokalemia leading to

increased serum creatinine. They can increase uric acid leading to gout and kidney stones. They can also increase glucose, LDL-cholesterol and triglycerides; and most immediately disturbing for many, they cause impotence.²⁵²

Physicians generally dismiss these conditions as benign side effects . . . the mere cost of cure. But many of these side effects are beyond benign; some are very serious—especially if you are the one suffering the supposed cure. It is a very fine line, if any, that separates the prescription of a drug with known side effects and an iatrogenic disorder. At some point they become indistinguishable. Perhaps when a side effect requires another medication to correct it? Or when another therapy without side effects is overlooked? Certainly if the alternate therapy is consciously neglected. And certainly if the offending drug is not indicated in the first place. Medication induced impotence is a prime example.

This significant side effect of pharmaceutical therapies for hypertension falls somewhere within this progression to iatrogeny. Proven alternative treatments void of side effects are either overlooked or consciously neglected by the physician. Knowing that impotence will likely ensue, the physician is ready to prescribe yet another drug (sildenafil citrate, Viagra) to address this most humbling disorder. But Viagra itself has considerable side effects. Aside from headache, flushing and dyspepsia,²⁵³ it has been linked to acute myocardial infarction, stroke and even death.²⁵⁴

But these side effects are given little attention. They are the acceptable collateral damage of cure. An article in the prestigious *Cleveland Journal of Medicine* has stated that “despite isolated reports of myocardial infarction and sudden cardiac death in men taking sildenafil for erectile dysfunction, clinical evidence shows the drug to be safe, effective, and well tolerated in most men with coronary artery disease.” In fairness to the author he did warn, “nevertheless, caution is advised in specific instances.”²⁵⁵

Is this not a convoluted message? It may kill you but it is safe. Most important, it works. And who are the specific instances? Those with a history of angina? Shortness of breath? Those taking nitroglycerine? Those with significant electrocardiogram changes? Those with a history of myocardial infarction? Transischemic attacks? Or perhaps it refers to one's favorite patient? The fact is it is not really known who should not take Viagra. What is known is that it is an unnecessary treatment and that some people seem to die from it.

Other drugs have iatrogenic effects as well. Lipitor (a cholesterol-lowering agent) is known to cause constipation, flatulence, dyspepsia, abdominal pain, jaundice and liver damage.²⁵⁶

Colchicine (a primary drug recommended for gout) can cause bone marrow depression with aplastic anemia (the defective function of the blood-forming organs such as the bone marrow), agranulocytosis (an acute febrile condition marked by severe depression of the granulocyte-producing bone marrow and by prostration, chills, swollen neck, and sore throat sometimes with local ulceration), or thrombocytopenia (a persistent decrease in the number of blood platelets that is often associated with hemorrhagic conditions). But these are just a few of its many possible, acceptable side effects. It can cause neuritis (a peripheral inflammatory or degenerative lesion of a nerve marked especially by pain, sensory disturbances and impaired or lost reflexes), purpura (a hemorrhagic condition characterized by patches of purplish discoloration resulting from extravasation of blood into the skin and mucous membranes), myopathy, loss of hair, azoospermia (the absence of spermatozoa in the seminal fluid), and central nervous system depression.

Overdose causes nausea, vomiting, abdominal pain and diarrhea, which is often bloody due to hemorrhagic gastroenteritis. There can also be burning sensations of the throat, stomach and skin; and extensive vascular damage may result from shock. Kidney damage,

as evidenced by hematuria (blood in the urine) and oliguria (reduced excretion of urine) may occur. Muscular weakness and ascending paralysis of the central nervous system can develop as well. The victim will usually remain conscious while experiencing delirium and convulsions. Death due to respiratory arrest would be the terminating side effect.

Although death has occurred from as little as 7 mg, we can find comfort in the fact that much larger doses have been survived.²⁵⁷ This we know because the recommended maximum dose in some medical textbooks is from 4 mg to 10 mg, far exceeding the 7 mg dose that has been known to cause death.²⁵⁸ But perhaps this is a moot point since gastrointestinal side effects are so severe that about 80% of the patients cannot tolerate the optimal dose,²⁵⁹ so why do they have to worry?

Of course this also makes the therapy of no effect, which makes one wonder why it is pursued in the first place? Especially when something as simple as twenty or thirty cherries a day can reverse the gout. But such is the reasoning of allopathy with its blind devotion to the fundamental philosophy of heroic intervention. Although very effective alternative treatments without side effect exist they are either overlooked or consciously neglected by physicians trained to rely on intervention with powerful synthetic drugs and their benign side effects.

This cost-of-cure philosophy was adopted from the European tradition of rationalist medicine—a philosophy of intervention and extreme heroics in which more is better. Dr. Wooster Beach provided a glimpse of this philosophy in action when describing the 1799 deathbed treatment suffered by General George Washington.

Think of a man being, within the brief space of little more than twelve hours, deprived of 80 or 90 ounces of blood; afterward swallowing two moderate American doses of calomel [mercury], which were

accompanied by an injection; then five grains of calomel, and five or six grains of emetic tater; vapors of water and vinegar frequently inhaled; blisters applied to his extremities; a cataplasm of bran and vinegar applied to his throat, upon which a blister had already been fixed.²⁶⁰

Dr. Beach followed this account with a brief commentary, “when thus treated, the afflicted general, after various ineffectual struggles for utterance, at length articulated a desire that he might be allowed to die without interruption.”

Not So Benign Side Effect

Without even considering the percentage of useless therapies, a Yale University study in the 60s showed that 20% of the hospital admissions suffered iatrogenic illnesses. In the 80s the New England Journal of Medicine reported the frequency of iatrogenic incidence had nearly doubled. Of 815 admissions, 36% became the victims of their physician’s medical practice. In 25% of the cases the problem was life threatening or caused considerable disability. Out of every one hundred people, two died. After examining more than one-hundred patients who developed serious kidney problems while hospitalized, the American Journal of Medicine determined that more than half were iatrogenic—caused by such procedures and treatments as x-ray dyes, restricted blood supply and kidney-damaging antibiotics.²⁶¹

This is the world of allopathic medicine. It is neither a science nor an art. Its primary role is to prescribe patented FDA approved pharmaceuticals. This is what sets it aside from other healthcare philosophies. That many of these drugs (especially those for diabetes, hypertension and lipid disorders) are known to cause more harm than good is of little concern.²⁶² Even when alerts are issued they fall on deaf ears, for until they are taken from the market

physicians have no obligation or motivation to stop using them. This is currently illustrated by the prescription and continued use of statin drugs. Despite public outcry and at least 81 known deaths from these drugs since 1987,²⁶³ physicians continue to prescribe them and patients continue to use them, trusting that their physician knows what he/she is doing.

Virtually all of the controlled, poisonous pharmaceuticals are designed to alter the body chemistry by inhibiting or somehow preventing normal cellular function; they are expected to have side-effects . . . it is the cost-of-cure.

Stuart Berger, MD, said, “perhaps the most widespread way our medical establishment makes us sick comes through the drugs we take.”²⁶⁴ “The drugs we swallow, inject, inhale, and apply every day have their own built-in flaws—part of the hidden price we all pay for our way of healing. They are the harvest of what we forgot to teach in medical school.”²⁶⁵ The great physician Oliver Wendell Holmes once said, “A medicine . . . is always directly hurtful; it may sometimes be indirectly beneficial. I firmly believe that if most of the pharmacopoeia were sunk to the bottom of the sea, it would be all the better for Mankind and all the worse for the fishes.”²⁶⁶

A Day in the ICU

Spend one day in the ICU of any busy hospital in America and you will find little has changed from the days of General Washington’s deathbed experience. The drugs and the treatments are different but many are no less painful or useless. Patients are routinely attacked with a barrage of severe and pointless procedures. They are restrained while needles are stabbed into their veins and arteries several times a day to collect blood for laboratory tests that generally do little more than document already known information. Every four hours and sometimes as often as every hour, someone is likely to pound on their chest in a futile attempt to promote the

expectoration of excess pulmonary secretions that do not even exist.

Many of these patients will have large tubes stuck down their throat into their airway in order to mechanically control their breathing. Saline is routinely squirted down this tube, followed by a long suction catheter to retrieve the solution and any secretions that might be present. Long catheters are placed into the jugular vein and threaded into the heart to collect more generally useless data. Then patients are zapped by radiation every morning for no particular reason other than that it is routine. Dr. John Gofman, one of the top radiation physicists in the country believes such medical radiation is probably the principle cause of cancer mortality and atherosclerosis in the United States during the Twentieth Century.²⁶⁷ He explains that radiation causes genetic mutations that eventually give rise to disease. Thus, with such a potent weapon, what would any ICU stay be without a trip or two to the CAT Scan department for a mega-dose of this radiation?

Because the ICU visit is so uncomfortable many patients are paralyzed by medication to keep them under control. If they are fortunate they will also receive sedation to make them sleep. Otherwise they lay there wide-awake, suffering the torment of treatment as well as the fright of paralysis. Oh yes, and sometimes these paralytic drugs are known to have residual effects that can leave the patient permanently crippled.

The crime is that although such procedures may be appropriate for certain patients they are used far too frequently. Some are routinely used for everyone, even those who are DNR's. This means the patient or someone with the patient's power of attorney has requested a "Do Not Resuscitate" order—a request for no heroics which does not sit well with the allopathic philosophy of heroic intervention. That such patients are on their deathbeds, at the end of their natural lives, means little to the interventional ICU physicians whose job it is to resist the inevitable. Consequently, theirs is a task

of continued failure. It is also a task of inflicting needless pain upon the dying.

Although legally binding the DNR does nothing to stop physicians from applying their heroic procedures. Generally, physicians will perform every possible intervention right up until the last heart beat. The sicker the patient the more procedures are performed. Once death finally arrives, to comply with the spirit of the DNR, the physician will hold back the ultimate heroic procedure—CPR, cardiopulmonary resuscitation. Of course this is all for show because by this point CPR is virtually useless anyway.

In time these procedures will give way to other, more advanced painful and useless practices. What will remain constant however is the experiential, heroic and interventional philosophy of rationalist allopathic medicine, the cost-of-cure, regardless of how ineffective and inappropriate it may be.

Chapter Twelve

Poisoning the Nation

The ultimate affront is that at the expense of our nation's health our government has sold us out to the pharmaceutical hoax. We have a government agency specifically designed to protect us from the harmful substances that unscrupulous con artists would attempt to market; but it is completely impotent and, ostensibly, has joined forces with the con artists. Established in 1906, the self avowed mission statement of the Food and Drug Administration (FDA) is,

To promote and protect the public health by helping safe and effective products reach the market in a timely way, and by monitoring products for continued safety after they are in use. Our work is a blending of law and science aimed at protecting

consumers.²⁶⁸

As for accomplishing this mission, the FDA is failing miserably. In some areas it has all but forsaken the task, approving countless poisonous food processing chemicals, food additives and food type items that destroy health, hasten disease and even death.

A Diet of Fat, Sugar and Chemicals

As far back as 1978, Dr. Ballintine reported that the average western diet consisted of 60% to 70% fat and sugar. Most of this diet is in the form of processed foods to which artificial flavoring, coloring and preservatives have been added. There are about 2,000 such additives used by the food industry, with the average person consuming some nine pounds of these chemicals every year.²⁶⁹ Each approved by the FDA for our consumption, and though denied by the FDA, cumulatively these toxins are a contributing factor to our western metabolic diseases. Dr. Nichols has concluded that the greatest single cause of these metabolic diseases in America is malnutrition and the FDA approved toxins in our food.²⁷⁰ True, in America we eat plenty of food type items, but they are stripped of nutrition and poisoned with chemicals.

Aside from ingesting these damaging, non-food, synthetic chemicals, it is well known that the biological process of metabolizing refined sugar and glucose products leaches necessary nutrients from the body and seriously disrupts both the production of adenosine triphosphate (ATP)—an energy producing compound, and the function of the Krebs's cycle within the mitochondria—also called the citric acid cycle, it is the process by which glucose is metabolized.

The production of ATP is an enzyme-controlled process for glucose degradation, but refined sugars supply no enzymes, nor do they have any of the sodium, potassium, calcium, magnesium, B vitamins or hormones that are essential for the Krebs's cycle to work. Although they provide an abundance of glucose, they provide none of

the substances the body needs to turn the glucose into energy. The body must rob these substances from its reserve supply. Furthermore, processed sugars and glucose go straight to the blood system and result in immediate hyperglycemia, which creates excessive stress at the cellular level. The cells are drowning in sugar. The pancreas hears their distress and excretes insulin, too much insulin because soon the blood sugar drops and then hypoglycemia ensues.²⁷¹ The victim eats more sugar and the process starts anew.

An abundant consumption of these processed products, as in our western diet, basically results in malnutrition. When an excess deficiency of any needed element develops the cycle can malfunction or shut down. Eventually, disease and even cellular death can and will occur.²⁷²

Most of the fats in our western diet are hydrogenated or fried oils. Many classify these as nothing less than poisons themselves.²⁷³ Hydrogenated oils are man-made saturated fats. Using nickel as a catalyst, a polyunsaturated oil is heated then hydrogen is forced into the oil. The hydrogen atoms attach to the available spaces on the carbon atoms of fat chains. When these spaces are filled or mostly filled by nature, we have saturated fats such as lard or animal tallow. When the spaces are only partially filled by nature, we have unsaturated oils. When the spaces are mostly unfilled by nature we have polyunsaturated oils such as olive oil. When the spaces are filled artificially we have a man-made hydrogenated vegetable oil. Margarine is such an oil.²⁷⁴

The entire process takes place simply to prepare a food-like item that will not spoil in order to maintain a long shelf life. However, not only does the hydrogenated oil not spoil, neither is it metabolized correctly by the body and all of the essential fatty acids of the once good oil (that the body desperately needs) are destroyed in the process. Although many would like to believe these oils are still intact and that the cells will get use of them, this is hardly the case. Dr.

Royal Lee illustrates it as such,

When you take a Cadillac automobile and melt it down, you don't have a Cadillac anymore. If you build a wheelbarrow with it, you've got a wheelbarrow instead of a Cadillac, and it will not do what a Cadillac will.²⁷⁵

The fact is, hydrogenated oils are non-food substances that the body simply does not know how to process.^{276, 277} The FDA allows these products to market because they generate enormous profit for their manufacturer's. But the cost for these products far exceeds the sticker price, it is much higher than we imagine. Beyond the sticker price is the cost of our nation's health. According to Dr. Nichols, these hydrogenated oils are the "Number One cause of heart disease."²⁷⁸

Fried foods create yet another problem. By heating the oil to extreme temperatures, oxygen rather than hydrogen atoms are forced to become artificially attached to the carbon atoms of the fat chains. These reactive atoms have a very loose affinity with the carbon atoms, held by compounds called free radicals. Once inside the system these free radicals easily disassociated from the carbon atoms. Once disassociated from the carbon atoms they attach to vitamins and other micronutrient molecules, which they oxidize and render biologically non-functional.²⁷⁹ Not surprisingly, these free radicals have been linked to cancer.

Another problem created by the overheating of vegetable oil is polymerization. Here the structure of the fat molecules is altered and linked together forming harmful compounds that lead to arteriosclerosis.²⁸⁰ To illustrate just how bad this problem is Dr. Nichols cites commercial peanut oils as yet another source of trouble. Made from NO. 3 peanuts.

These are the peanuts that have become rancid.
When that little thin covering around a peanut is

broken, the peanut will become rancid. However, the food chemists have learned how to clean it up, deodorizing and decolorizing, so that it can be sold. Profit, remember, is the guiding theme and motive in our food industry. By then it's junk, but they dress it up to look like food, and it sells as food. But it's an imposter, and should be exposed as such.²⁸¹

Despite the fact that the scientific community is well aware of the physiological detriments of these non-foods, and despite the ample evidence linking cardiovascular disease to this western diet,²⁸² the FDA still continues to place its stamp of approval on these deadly substances—even assuring us they are healthy foods. A prime example of this is the flour milling industry, most of which voluntarily changed its bleaching process many years ago after reports published in the *British Medical Journal* demonstrated that the nitrogen trichloride process was a central nervous system poison. Flour bleached by this process proved to cause running fits in dogs and other animals. The offending substance turned out to be methionine sulfoximine, a by-product of the bleaching process. It is suspected that this could have been the cause of much of the country's mental illness in the early part of the 20th Century.

There are two questions for the FDA. Why were all millers not forced to change? And why were millers allowed to change to yet another untested process? Although the new process, chlorine dioxide bleaching, did not create the offending by-product, methionine sulfoximine, it did create alloxin and other chemicals to which people react. A subsequent study published in *Lancet* reported eczema, mental disturbance and anorexia related to flour that had been bleached with either the nitrogen trichloride or the chlorine dioxide process. The new process presented symptoms even more quickly and with greater intensity than the old.²⁸³

Even more alarming than the FDA's unwillingness to protect the

public, is that the medical community follows suit—actively endorsing the consumption of these processed junk foods.

Physicians are Part of the Problem

Metabolic diseases are on the rise at A dreadful pace. For years, many researchers have warned of this, linking these diseases to our western diet, but the warnings fall on deaf ears. Thirty years ago Dr. Nichols observed that,

We have made great progress in the prevention of infectious diseases, both bacterial and viral. But we have made practically no progress in the prevention of metabolic disease, and we will never prevent metabolic disease until we learn how to give our people proper nutrition.²⁸⁴

Rather than taking heed to Dr. Nichols and others, physicians have proceeded headlong in the opposite direction, crippling generations of children by replacing their mother's natural nutrition and necessary immunity-building colostrum with the mother of all junk food, processed formula.²⁸⁵ The modern physician is trained to do everything within his or her power to convince every young mother to forego breast-feeding in favor of the processed formula. He or she assures the young mother that it is just as good, even better, for the baby than breast-feeding.

Aside from the fact that the mother will be far more likely to develop breast cancer if she does not breast feed, the processed formula is but the first step in the life of the typical American junk food junkie. Soon the baby is weaned to other FDA approved economy booster like processed cereal—riddled with food dye, chemicals and refined sugars bathed in chemically reinforced cow's milk. Then on to packaged TV dinners—more chemicals and meats pumped full of FDA approved hormones and antibiotics. Then come French fries made in polymerized oils, spoiled peanut butter,

margarine and various other hydrogenated oils. It could be classified as biochemical warfare. It destroys slowly but it destroys effectively. By some estimates, 17% of American children are now diagnosed with Attention Deficit Disorder (ADD). Is there any wonder?

At the 2001 annual meeting of the American Society of Hypertension, Dr. Johnathan Sorof, co-director of the Houston Pediatric and Adolescent Hypertension Program, reported the results of a study performed by the University of Texas. The Houston Medical School measured blood pressure and weight of 2,500 public school students at an average age of 15 years. One-third of the students were overweight and 17% had high blood pressure.²⁸⁶ Will the researchers consider poor nutrition as a primary factor for these abnormalities? For the weight, perhaps; for the hypertension, it is unlikely. Doubtless, like the ADD children—90% of whom are casually placed on Ritalin—these teens will be started on a popular drug regimen to control their environmentally acquired disease process.

Juvenile cancer, once a very rare occurrence, has been on the rise for years. From 1974 to 1991 there was an overall average increase of about 1% each year in all malignant neoplasms among children younger than 15 years of age. In 2001 there will be an estimated 8,600 new cases. Cancer is the leading cause of death by disease in children between the ages of 1 and 14 years.²⁸⁷ An epidemic of asthma is also underway in America. Over the last decade the number of asthmatics has more than doubled. The total deaths from asthma have increased from 1,674 in 1977, to 5,637 in 1995.²⁸⁸ Yet, another metabolic disease on the rise is Type 1 (Juvenile) diabetes. There are more than 1 million Americans with this disease. It strikes suddenly, makes them insulin dependent for life and carries the constant threat of devastating complications. On average, every hour someone is diagnosed with Juvenile diabetes. It can and does strike adults as well. Although allopathy confesses it does not know the

cause some scientists suspect that the body's own immune system attacks and destroys insulin-producing cells in the pancreas.²⁸⁹

I, as others before me, submit that the primary causes for the increased metabolic disorders are promoted by the American medical community and approved by the FDA. The FDA approves the non-food and toxic-food items that result in our malnutrition and ultimate ill health. It approves the chemical food additives, preservatives, processing agents and fertilizer that slowly poison our bodies, and it allows our meats to be defiled by antibiotics and hormones, each of which opens the door to a host of health complications.

Then, as if to correct the error, the FDA approves the synthetic chemical agents, the pharmaceuticals that are supposed to bring cure from the metabolic illness caused by the approved pollutants. But while disease can be achieved by the consumption of unnatural, synthetic chemical, cure cannot. The late Dr. Tom Douglas Sipes would agree. Years ago, when accepting the AMA's Service Award he said,

All diseases are caused by chemicals, and all diseases can be cured by chemicals. All the chemicals used by the body—except the oxygen which we breathe and the water which we drink—are taken in through food. If we only knew enough, all diseases could be prevented, and could be cured, through proper nutrition. . . . If we can help the tissues repair themselves by correcting nutritional deficiencies, we can make old age wait.²⁹⁰

We even import our chemical warfare to other countries, despite the fact that it is now common knowledge that cultures who do not eat our western diet of hydrogenated oils, processed sugars and poisonous chemicals for the most part do not suffer our western diseases . . . at least not in epidemic proportions.^{291, 292} It is also common knowledge that those cultures who are subjected to our diet

soon begin to die of our diseases. If this promotion of processed junk food is not a consorted effort to create disease, it is certainly a blatantly stubborn display of ignorance.

Of course the oversight and approval of pharmaceutical agents is another part of the FDA's duty; but given its pitifully poor track record, perhaps the acronym FDA should stand for the Fraudulent Drug Authorization. It is no secret that the FDA routinely approves drugs that are known to create more damage than good. Drugs that deal with diabetes, hypertension and cholesterol are among the prime offenders. Although significant evidence shows these drugs to have substantial, even life-threatening side effects, the FDA still allows them to enter the market. Although some are eventually taken off the market, it is only after they have destroyed many lives and made their perspective pharmaceutical company billions of dollars.²⁹³

If one were the suspicious type, one might wonder if the FDA is not a front organization for allopathic pharmacopoeia. First it approves the poisonous food items for public consumption; then it approves poisonous synthetic drugs to deal with the diseases caused by the consumption of the poisonous food items. Because the approved drugs fail to affect cure, each year they approve even more, despite repeated failure and the known liver damage that most of these hopeful cures cause. Evidently the FDA has never considered the simple concept that inorganic synthetic poisons cannot positively affect living cells.

FDA and Politics

What, you might ask, is the motivation? What would motive the FDA to abandon its mission and stoop to peddling poisons, or rather providing the oversight and sanction thereof? The answer is simple. Bureaucratic clout and job security. About 25 cents of every consumer dollar spent in America is spent on FDA-regulated products. It is a one trillion dollar a year industry.²⁹⁴ Not that the FDA receives

these proceeds, but the industries they regulate do. Practically speaking, this means that the food and drug industries wield a lot of power in the political world of which the FDA is a branch. Is there anyone in the country who seriously doubts that shady deals and political corruption are a part of the American political framework?

Although it is not the objective of this work to investigate the FDA or to pursue political corruption, I will question its motivation and with good cause. The indictment could be made that in order to allow this trillion-dollar economy to flourish, the FDA has overlooked the long-term poisonous effects of such items as hydrogenated oils, cancer causing food additives and junk food substitutes that necessarily prevent the absorption of vital nutrients like vitamins A, E, and omega-3 fatty acids. Another example is the permitted pollution of our meats. Even despite ample evidence of the harmful effects, the FDA continues to allow the country's meat and dairy supply to be pumped full of antibiotics and hormones while it allows the farmlands to be littered with toxic chemical fertilizers. In their defense are plenty of scientists who argue that the chemicals are safe; but indicting them are other scientists and the outcome . . . our western diseases.

Admittedly, these substances might have been allowed on the market in the early years—assuming short term testing showed no apparent danger. But it is also part of the FDA's self-avowed mission to monitor products for continued safety after they are in use. They have vowed to employ both law and science for consumers' protection.²⁹⁵ Many years have passed and the jury's verdict has long since returned. The consumption of these substances is detrimental to health. They are slowly poisoning the nation. Although the FDA says it has a duty to put an end to the use of such products, more importantly, being the puppet that it is, it knows it must obey the puppeteers.

In the end it is far easier to satiate the power brokers by ignoring,

even denying, the danger and to convince the public that not only is there no harm but that the chemicals actually promote health. As bizarre as it may sound, I can understand the FDA's position. After all, this is a bureaucracy, 9,000 staff members investigating 400,000 cases a year and 167 field officers making 16,000 on-site visits.²⁹⁶ Bureaucracies do not think, they simply do. A bureaucracy is like an object in motion by kinetic energy. Once set in motion it is difficult to alter its course. It is even more difficult to stop it. Doing so takes an object of equal or greater mass. To stop or alter the course of the FDA is a job for our elected officials and ultimately the voting public.

In the meantime the FDA will jump through the hoops set before it. The mission statement is merely for show for mission statements are in vogue. Mission statements are meant to inspire and direct those who have the ability to affect their environment. As a bureaucracy, the FDA cannot do this. Its self avowed mission statement is negated by its higher duty to obey. It must dance to the tune of the political movers and shakers who are swayed by the lobbyists of the massive food and drug economy. In the meantime our nation is dying.

Medical Establishment Accepts the Poisons

What I cannot understand is the medical community's refusal to speak up about these issues. This is not a bureaucracy. It is a body of supposed scientists who are supposed to have their patients' health in view. I find it hard to believe that a conscious effort exists on the part of the medical establishment to purposefully neglect nutrition and promote malnutrition in order to create disease and thereby assure themselves business. It sounds too fantastical, too conspiratorial, too crazy; but barring naïveté and even outright stupidity, I can think of no logical answer for their action other than simple job security. At the very least they are guilty of passively watching the blind man walk off the cliff. But even this is witness to a clandestine agenda.

Admittedly, conspiracy is a bit far-fetched; but an industry wide mindset geared toward job security is far from far-fetched. Indeed such a mindset is exhibited in many government and unionized jobs. And there is good evidence for a naive defense—at least on the part of the clinical practitioners. Nutrition is simply not a primary topic in medical school. In 1979, Dr. Nichols confessed that although he had a MD degree he “knew practically nothing about nutrition. Nutrition was not taught in medical school in 1932. Unfortunately the subject of proper nutrition is still not taught in our medical schools.”²⁹⁷

Current medical college curriculum and medical practitioners show that little has changed since Dr. Nichols’ day. Even in those schools that do address nutrition the information is likely askew, based upon some imagined food pyramid and the fallacious desired substitution of natural fats for synthetic hydrogenated oils. To this regard a Harvard University Professor has been quoted as teaching his students to “go into any grocery store and get a variety of the four food groups and you will get a proper, balanced diet.”²⁹⁸

No doubt for philosophical reasons, the allopathic medical establishment seems hell-bent to deny any link between health or ill health and nutrition. Nutrition is too holistic in nature and flies in the face of heroic intervention. But there is no denying that a link does exist proportionately to the ever-increasing consumption of foods with little or no nutritional value and the growing number of victims suffering cardiovascular disease, asthma, diabetes, allergic and autoimmune disorders, and other western diseases.²⁹⁹ As the national dependence upon processed foods increases so too do these diseases.

Chapter Thirteen

Nutrition by Attrition

Despite the fraternal peer pressure for conformity, public and scientific pressure is mounting for physicians to acknowledge the value of the holistic philosophy. Each year the public grows more concerned about nutrition versus drugs; and each year the stack of scientific studies grows ever larger, supporting the holistic philosophy over the interventional pharmacological philosophy of allopathy.

Nutrition is Slowly Gaining Ground

Recently even the prestigious Harvard School of Public Health released a timid concession that “emerging evidence suggests an important role of dietary factors” in the modulation of endothelial dysfunction caused by cardiovascular and other diseases. The report

conceded that in particular omega-3 fatty acids, antioxidant vitamins, folic acid and L-Arginine appear to have beneficial effects on vascular endothelial function, both for those at high risk of cardiovascular disease and healthy subjects.³⁰⁰

Others have addressed these nutritional factors as well. In France, Tessier et al noticed that among the hospitalized cancer patients “malnutrition prevails.”³⁰¹ Thus, these surgeons now provide supplemental nutrition with antioxidant micronutrients: arginine, glutamine, ribonucleic acids and omega-3 fatty acids to achieve an immuno-modulation of the renutrition during hospital admission.

They recommend that other surgeons do the same and have pointed out that even for the non-cancer patient undergoing surgery, denutrition decreases the immunological responses of postoperative recovery. Healing is altered and infectious complications increase.

In Madrid, Martinez Vazquez speaks to the importance of enriched nutritional enteral formulas with patients in critical condition.³⁰² He has found that such feedings improve the rate of infections, reduce the number of days on mechanical ventilation and shorten the length of stay. Immunonutrients or immunity regulators such as glutamine, arginine, omega-3 fatty acids nucleotides have a considerable influence on the immune function and the improvement of certain metabolic and nutritional indices. He has documented the greatest effect on surgical patients, noting that the stress from major surgery, sepsis, injuries, etc., increases the requirements of certain essential nutrients as well as other nutrients generally considered non-essential or semi-essential.

From Japan, Watanabe has demonstrated that oral L-Arginine supplementation “has beneficial effects on glomerular filtration rate, natriuresis, and plasma endothelin level in patients with chronic congestive heart failure.”³⁰³

Discussing the Mediterranean versus the western diet, in the *Journal Cardiologia*, Massaro makes a profound admission,

Despite the use of new cholesterol-lowering drugs, atherosclerotic vascular disease will likely continue to be the main cause of death in western countries. . . . For these reasons, the interest in preventive approaches complementary or alternative to cholesterol reduction should be one of the main objectives of cardiovascular research in the years to come.³⁰⁴

White Papers

All of this attention on nutrition is bound to generate opposition in the form of white papers. Major pharmaceutical companies and the society of cardiovascular experts are well aware of the potential damage L-Arginine could bring to their businesses. As physicians slowly succumb to the evidence and to public pressure we should expect more white papers to appear. But like a sandbag dike trying to hold back a tidal wave, in short time this meaningless, if not ludicrous, opposition crumbles.

Because L-Arginine in particular is of such importance to the cardiovascular system, eventually clinicians will have to recognize its benefit and employ it as a therapy. The biochemical L-Arginine/NO pathway is too well documented, too exacting and too necessary for cardiovascular victims for any commercial entity to hold it back much longer. But they will try and the papers will continue as desperate pharmaceutical advocates apply last-ditch efforts to save their economy.

One recent study came up with an interesting twist in which they attempt to dissuade clinicians from using L-Arginine versus pharmaceuticals for CAD patients.³⁰⁵ It broached the argument by asking how does L-Arginine affect the homeostatic functions of the vascular endothelium in CAD patients being maintained on traditional pharmaceutical therapy? The study showed that in the

patients on synthetic drug therapy, L-Arginine has no effect on nitrogen oxides, flow-mediated dilation of the brachial artery, the cell adhesion molecules E-selectin, intercellular adhesion molecule-1, or on vascular cell adhesion molecule-1. Therefore, they concluded that “Oral L-Arginine therapy does not improve NO bioavailability in CAD patients on appropriate medical management and thus may not benefit this group of patients.”

In essence, the study argues that there is no need to encourage the use of an inexpensive natural and necessary substrate that is void of side effects and even able to reverse the condition, when our expensive synthetic drug that boasts many side effects and cannot reverse the condition is working just fine. Such logic could only flow from those indoctrinated by the philosophy that pharmaceutical “magic bullets” are the answer to every disease. It is for such reasons that Dr. Atkins has charged his colleagues with being “so wrapped up in their fear of nonconformity that they fail to see that they have been systematically brainwashed.”³⁰⁶

As if to satiate the opposition of years of growing research the authors tempered their conclusions by admitting “It is possible that the effect of oral L-Arginine . . . might have been detected in participants had we stopped . . . medications during the study.”

But other significant features of the study also affected outcome. This was a population of severely advanced cardiovascular disease patients with significant endothelial dysfunction. Although plasma arginine levels nearly doubled during supplementation, from 70 ± 17 to 130 ± 53 $\mu\text{mol/L}$, even the 130 $\mu\text{mol/L}$ is significantly lower than the arginine plasma levels in previous studies. Adams et al demonstrated substantial improvement in less severe CAD patients with baseline arginine levels of 124 $\mu\text{mol/L}$, which increased to 318 $\mu\text{mol/L}$ after supplementation. The 130 $\mu\text{mol/L}$ post supplementation in this study is hardly greater than the pre-supplementation of other diseased subjects of the Adams study.³⁰⁷

In another article published in the same edition of *Circulation*,³⁰⁸ Loscalzo addresses several of the problems with the previously mentioned study. He points out that there was no evidence that the low L-Arginine dose actually increased NO production, which is the purpose of L-Arginine supplementation. Each measured outcome of the study was contingent upon this feature. Loscalzo suggests a few possibilities as to why these levels of serum arginine did not increase NO production: a limited cellular uptake, the competing inhibition of an eNOS analogue, or a limited cofactor availability. Among other possible reasons, he also draws attention to the fact that prior medications had “improved endothelial function to a degree, beyond which further improvement could not be realized,” and the presence of these agents could have negated possible effects of L-Arginine.

Hard to Admit

Another white paper, the Zutphen Elderly Study, was published in the September 2000 edition of *Arteriosclerosis, Thrombosis, and Vascular Biology*—a publication of the American Heart Association.³⁰⁹ Researchers from the Netherlands had hoped to examine whether the dietary intake of arginine is associated with reduced risk of coronary heart disease in the elderly. After a 10-year cohort follow-up study, they found no evidence to support the hypothesis. But the study was obviously skewed. Curiously, the subjects actually ate low-arginine diets versus high-arginine diets, as such a study would require.

According to the researchers, the mean standard deviation baseline arginine intake was a mere 4.35 ± 1.07 grams/day. This is well below the mean arginine intake of even a normal diet which consists of 5 to 6 gram/day,³¹⁰ and it is markedly below the additional 2 to 6 grams/day for a total daily intake from 7 to 12 grams—as recommended by previous research.³¹¹ Some researchers, such as the Adams study,³¹² have used as much as 21 grams/day with very

positive outcomes.

That the L-Arginine/NO pathway modulates vascular tone, maintains and even reverses coronary artery disease is no longer even seriously debated. In the light of the many studies over many years that have routinely provided consistent evidence, such studies are quite non-convincing.

Discounting a clandestine agenda, it is surprising that researchers would use such inappropriate data to support such obviously erroneous conclusions. That the American Heart Association would publish such a study is more than telling as to the motivation and tactics of this powerful American medical entity.

Many reputable studies have demonstrated the significance of the L-Arginine/NO pathway. From the Department of Internal Medicine, Mayo Clinic and Foundation, Lerman et al published a work in the June 1998 issue of *Circulation* entitled *Long-term L-Arginine supplementation improves small-vessel coronary endothelial function in humans*.³¹³ This double blind, randomized study tested the effects of long-term 6-month supplementation of L-Arginine on coronary endothelial dysfunction to acetylcholine in humans with nonobstructive coronary artery disease.

Like others, the Mayo researchers determined that “Long-term oral L-Arginine supplementation . . . improves coronary small-vessel endothelial function in association with a significant improvement in symptoms and a decrease in plasma endothelin concentrations.” They boldly proposed that L-Arginine be used as “a therapeutic option for patients with coronary endothelial dysfunction and nonobstructive coronary artery disease.”

Other prestigious researchers at the famed Shiners Burn Hospital and Trauma Service, Massachusetts General Hospital, published an article in March 2001 entitled *Arginine and ornithine kinetics in severely burned patients: increased rate of arginine disposal*.³¹⁴ They demonstrated the necessity of arginine supplementation for the

severely burned patient. They found that “arginine serves multiple roles in the pathophysiological response to burn injury.”

Their previous work had demonstrated a limited net rate of arginine de novo synthesis, despite a significantly increased arginine flux. This had suggested that arginine is a conditionally indispensable amino acid after severe burn. The second study compared values from healthy volunteers and found that injury from burns significantly “elevated arginine oxidation, with limited net de novo synthesis from its immediate precursors.” Thus, confirming their previous findings. Arginine is indeed an essential amino acid in severely burned patients and nutritional supplementation is most important.

Published in the March 2000 edition of *Critical Care Medicine* is another prospective, randomized study entitled *An immune-enhancing enteral diet reduces mortality rate and episodes of bacteremia in septic intensive care unit patients*.³¹⁵ The objective was “to determine whether early enteral feeding in a septic intensive care unit (ICU) population, using a formula supplemented with arginine, mRNA, and omega-3 fatty acids from fish oil (Impact), improves clinical outcomes when compared with a common use, high protein enteral feed without these nutrients.”

This multi-centered study took place in the ICUs of six hospitals. A total of 176 septic patients were given one of two enteral feedings. Diet #1 was enriched with arginine, mRNA, and omega-3 fatty acids from fish oil. Diet #2 was a common high protein control feeding. The 89 patients treated with diet #1 showed several significant improvements over the 87 patients treated with diet #2. The mortality rate was lower: 17 vs. 28. Bacteremias were lower: 7 vs. 19. Multiple nosocomial infection were lower: 5 vs. 17. And of those with APACHE II scores between 10 and 15, the benefit in mortality rate was very impressive: 1 of 26 vs. 8 of 29.

Department of Surgery, Scientific Institute

A similar study was published in the November 2000 edition of *Pancreas*.³¹⁶ Researchers from the Department of Surgery, Scientific Institute San Raffaele Hospital, Milan, Italy, conducted this prospective, randomized trial of 212 pancreaticoduodenectomy patients. The objective was “to evaluate whether the route of administration and the composition of the postoperative nutritional support could affect the immunometabolic response and outcome.” Patients randomly received one of three formulas. A standard enteral formula: 73 patients. An immunonutrition enteral formula enriched with arginine, omega-3 fatty acids and RNA: 71 patients. A total parenteral nutrition: 68 patients.

On postoperative day 8, patients receiving the immunonutrition enriched feeding had a significantly better recovery of the immunometabolic parameters compared to the other two groups. The rate of postoperative complications was lower in the immunonutrition group at 33.8%, vs. the standard group at 43.8%, and the parenteral group at 58.8%. The mean length of stay was also shorter in the immunonutrition group than in the standard and parenteral groups: 15.1 vs. 17.0 vs. 18.8 days, respectively. Once again, allopathic researchers admitted that “Immunonutrition ameliorates the immuneometabolic response and improves outcome.”³¹⁷

However, because nutrition is diametrically opposed to the fundamental interventional approach of allopathic belief that invaders (virus, bacteria, cancer, allergens) must be killed, inhibited or excised, and cure must be achieved via a medication, radiation, or surgery, there will always be opposition to any therapy—including nutrition—that has even the slightest hint of holistic medicine.

Then too, there is the ego factor. L-Arginine has no mystic. It is not regulated. Recommending this is like prescribing filet mignon. Certainly, physicians must provide their patients a more potent substance, something synthetic, something controlled, something worthy of their superior education.

Conclusion

Cease Relying on Allopathy's Proven Failure

The primary objective of allopathic medicine is threefold: to diagnose disease, to treat disease symptoms and to stave off the inevitable (death) for as long as possible. The entire clinical setting revolves around these virtuous challenges with compound interventional and heroic measures routinely employed and at nearly any cost, regardless of their predictably ineffective outcome. But we are saving lives; at least that is what we tell ourselves.

Beyond this facade another script is being performed with similar intensity. Medicine is a very competitive business that generates many billions of dollars every year. There are far more players

behind the curtain than one might imagine, powerful players with self-serving agendas. Entire industries revolve around western allopathic healthcare: medical device manufacturers, sales firms, consulting firms, educational facilities, research groups, publishing companies, grant recipients and vying for the top of the list, pharmaceutical corporations and their minions—the physicians who link them to their market, the patient.

The financial success of both clinical medicine and the supporting industries is completely dependent upon clinical failure. Each of them needs the threefold objective to remain center stage. Anything that threatens to change or to somehow diminish their market, their patient base, is not welcome. Traditional and alternative therapies such as nutrition and nutritional supplements, although proven effective—indeed especially because they are effective—are not welcome. They disrupt the status quo and cast suspicion on the lucrative methods of proven failure.

Do I mean to indict the entire allopathic industry? No, I do not call for the complete discard of allopathy, merely its reform. Much of modern allopathy is helpful, nearly miraculous at times—especially in the area of trauma and reconstructive surgical procedures. But to understand and promote health is not its genius. L-Arginine supplementation has been a prime example. Despite years of research proving the necessity of arginine-derived nitric oxide and the profound benefits of oral L-Arginine supplementation, despite researchers even winning the Nobel Prize for work in this area, this therapy goes virtually unnoticed and certainly unutilized by the modern allopathic, pharmaceutically biased, medical establishment. Not because its effectiveness is in question but because its effectiveness is feared.

I call for allopathic physicians to admit defeat and to adopt a holistic philosophy of health. The medical education must be reformed—the neurotic obsession with the philosophy of

intervention; the pitifully inferior academic content; and the surprisingly minimal time in which the medical degree is earned. One can not learn medicine with a mere two years of classroom studies and another year of two of job shadowing.

Surgeons and physicians have always differentiated amongst themselves; I submit that this differentiation be pressed further within the healthcare and academic communities. Those surgeons who provide emergent, critical and reconstructive procedures are sorely needed; although they too would benefit from a better education, for too many of their valued skills are learned on the job rather than in controlled settings. But allopathic physicians, the doctors of death and disease, mere pharmaceutical pimps, must be replaced by holistic physicians who truly understand health, healthcare and nutrition; who teach their patients how to maintain health, rather than simply fill their bellies full of synthetic chemicals that alter and destroy normal cellular function.

Lest there be confusion, let me reference a real-time scenario that aptly illustrates the difference between the allopathic and the holistic philosophies. Over the last decade the number of diabetic diagnoses has grown by more than 6% and is still rising. In some regions of the county it is simply epidemic. The naturopathic approach to this obvious cultural/diet issue is to teach the populous how to eat correctly or, more specifically, the importance of avoiding the offending foods which unfortunately seem to be the staple of their diet (excessive carbohydrates, refined sugars, fried foods and hydrogenated vegetable oil—all of which, aside from being extremely unhealthy cause obesity, a condition directly linked to diabetes). Conversely, the allopathic approach is merely to prescribe insulin. Oh, the allopathic practitioner might gently caution against such foods, just as he/she hands over the insulin prescription thereby effectively nullifying the reproof; for in the patient's mind, "why bother changing my life when a drug will work?" In truth, whether

patients do or do not modify eating habits is of little concern, either way, patients are getting the insulin. To allopathy this epidemic merely represents an increased market share, a great opportunity for more office visits and more prescriptions.

I also call for a moratorium on the pharmaceutical industry. It is a greed driven industry and their only concern is the bottom line of their quarterly financial statements. They manufacture synthetic drugs simply because the drugs can be patented. Then the drugs are market based upon a supposed (albeit virtually non-existent and at times even fabricated) curative value. But synthetic chemicals cannot cure organic disease anymore than eating styrofoam can cure diarrhea. It might plug you up for a while but in the end you will suffer for it and the condition, if you live through the cure, will persist.

This is not to say that the pharmaceutical industry has not manufactured valuable products. There have been a number of worthy medications (mostly derivatives of organic materials) produced by the industry. But organic materials, although effective, do not generate the income of their synthetic counterparts.

My last suggestion, and one bound to prove even more controversial than the first two, is the total deregulation of the dispensing of pharmaceuticals. Yes, the legalization of drugs; at least medical pharmaceuticals.

To this I suspect there are two primary objections: the one medical, the other social. The medical concern is that for safety and health reasons a physician needs to diagnose and prescribe the proper medication. To this I respond, "You have not really understood this book. Although this is the supposed function of our physicians, with a 40% to 60% misdiagnosis and an even more pitiful failure to properly prescribe the accepted medication, they are not doing this very well, indeed often they do more harm than good. It is time to let individuals be responsible for their own health."

The social concern is that pharmaceuticals will be abused thereby creating a society of drug abusers. I flat out reject this argument. I believe the increased alcohol abuse during the period of prohibition showed the fallacy of this reasoning. Many drugs are currently legal and many more are easily attainable yet there is no evidence of abuse by the majority of the population. The truth is, if people want to use drugs they are going to do so whether they are legal or not. Indeed legalizing them would take away the criminal element; those who committed a crime or even a motor vehicle violation under the influence of a medication or alcohol could be severely punished.

What, might you ask does the deregulation of pharmaceuticals have to do with healthcare reform? Simply, as pointed out earlier, that the primary purpose of the allopathic physician is to peddle drugs for the pharmaceutical industry. If the dispensing of these products were deregulated physicians would be forced to learn and practice healthcare, for they would have to prove their worth rather than ride the shirrtail of bureaucratic regulation, which currently mandates their existence and protects their ignorance.

Appendix A

L-Arginine as a Therapy

L-Arginine is one of several simple amino acids. Amino acids are the building blocks for protein. Some are considered essential, others are non-essential. Non-essential amino acids are produced by normal biochemistry; essential amino acids are not, they must be obtained by diet. Strictly speaking, L-Arginine has been classified as a non-essential amino acid; however in light of recent findings some researchers have begun to debate this.³¹⁸ Because individuals with certain diseases do not produce sufficient ADNO quantities and because L-Arginine is found in various meats and dairy produces (the average daily diet containing about 5 to 6 grams),³¹⁹ some argue that it should be considered essential.³²⁰

The Essential Non-Essential Amino Acid

Whether L-Arginine is considered essential or non-essential is purely academic; in the practical world, it is certainly most essential for those who suffer CVD. Years ago Bogle et al demonstrated the necessary transport of arginine into endothelial cells to supply continuous NO formation.³²¹ This biochemical process is inhibited by CVD and—as demonstrated by many studies—enhanced by L-Arginine supplementation which can both protect against and reverse vascular disease.^{322,323} In the years since Bogle’s discovery many studies have proven the necessity of L-Arginine for several biochemical cardiovascular functions. Here are but a few of these studies.

Reversing Vascular Dysfunction

Berkenboom et al examined the endothelial function of internal mammary arteries in patients with coronary artery disease (CAD) and in heart transplant recipients.³²⁴ Their study consisted of:

- 16 patients with CAD.
- 16 heart graft recipients who underwent transplantation for nonischemic heart failure.
- 12 patients with coronary artery disease and peripheral vascular disease (PVD).
- 6 patients in the control group.

Findings published in the March 1998 edition of the American Heart Journal, reported that L-Arginine infusion restored responses to acetylcholine in both the CAD and PVD groups. The “endothelin plasma levels were significantly enhanced in the PVD group, which exhibited the most severe impairment in acetylcholine-induced

vasodilation.” The authors conclude that in CAD patients—particularly those with advanced atherosclerosis and cardiac transplant recipients—internal mammary artery endothelial dysfunction seemed to be reversed by L-Arginine.

A 1997 study sponsored by the National Heart, Lung, and Blood Institute titled *Effect of L-Arginine on human coronary endothelium-dependent and physiologic vasodilation*, demonstrated that L-Arginine “improved endothelium-dependent coronary epicardial and microvascular function in patients with endothelial dysfunction.”³²⁵ Furthermore, the authors recommended L-Arginine as a therapy for treating myocardial ischemia to prevent epicardial constriction during physiologic stress in patients with endothelial dysfunction.

From Brazil further evidence has emerged concerning L-Arginine’s ability to treat heart failure. In the March 2000 issue of *Clinical Cardiology* titled *L-Arginine reduces heart rate and improves hemodynamics in severe congestive heart failure*, Bocchi et al reported the effects of L-Arginine on heart rate, hemodynamics and left ventricular function in congestive heart failure.³²⁶

L-Arginine decreased:

- heart rate (from 88 ± 15 to 80 ± 16 beats/min, $p < 0.005$)
- mean systemic arterial pressure (from 84 ± 17 to 70 ± 18 mmHg, $p < 0.007$)
- systemic vascular resistance (from 24 ± 8 to 15 ± 6 Wood units, $p < 0.003$)

L-Arginine also increased:

- right atrial pressure (from 7 ± 2 to 10 ± 3 mmHg, $p < 0.04$)
- cardiac output (from 3.4 ± 0.7 to 4.1 ± 0.8 l/min, $p < 0.009$)

- stroke volume (from 40 ± 9 to 54 ± 14 ml, $p < 0.008$)

The study also showed that while the ratios of pulmonary vascular resistance to systemic vascular resistance at baseline and during nitric oxide inhalation were 0.09 and 0.075 respectively, with L-Arginine it increased from 0.09 to 0.12. This overwhelming evidence lead researchers to conclude that although L-Arginine exerts no effect on contractility, it does affect systemic vascular resistance thereby improving cardiac performance and presenting a negative chronotropic effect. As is par for all medical scientist—trained to discuss their research timidly and with great trepidation of actually being correct, the authors suggest that the “beneficial effect of L-Arginine on reversing endothelial dysfunction in CHF without changing LV contractility should be the subject of further investigations.”

An interesting study from Hutchison et al³²⁷ at the Division of Cardiology, University of California, San Francisco, published in the 1999 July edition of Hypertension demonstrate that via deleterious effects on endothelial function, the long-term dietary supplementation of L-Arginine even mitigates the atherogenesis and endothelial dysfunction caused by secondhand smoke. This is significant to all non-smokers who must suffer the constant inhuman exposure to cigarette smoke.

Lowering Hypertension

In the May 2000 edition of the American Journal of Hypertension, Siani et al published an article titled *Blood pressure and metabolic changes during dietary L-Arginine supplementation in humans* in which they confirmed years of previous research.³²⁸ Their goal was “to determine the effects of L-Arginine-rich diets on blood pressure, metabolic and coagulation parameters.” To achieve this

goal they performed a single blind, controlled, crossover dietary intervention in 6 healthy volunteers who were placed on one of three diets in random sequence for 1 week.

- Diet #1: control
- Diet #2: L-Arginine enriched by natural foods
- Diet #3: identical to Diet 1 plus oral L-Arginine supplement

The results were significant. Both L-Arginine-rich diets decrease blood pressure significantly. Systolic BP dropped by 6.2 mm Hg in both L-Arginine diets, while diastolic BP dropped 5.0 mm Hg in the L-Arginine enriched Diet #2 and 6.8 mm Hg in the oral L-Arginine supplement Diet #3. After Diet #2 serum total cholesterol and triglyceride also decreased while HDL cholesterol (the good cholesterol) increased.

From Australia, Adams et al conducted a prospective, double blind, randomized, crossover trial with 10 men aged 41 ± 2 years with coronary atherosclerosis as evidenced by angiography.³²⁹ Subjects were given L-Arginine (7 g three times/day) or a placebo for 3 days. Compared to placebo, plasma levels of arginine during L-Arginine supplementation increased (318 ± 18 vs. 124 ± 9 $\mu\text{mol/L}$, $P < 0.01$). At the same time, endothelium-dependent dilatation in the brachial artery improved considerably (4.7 ± 1.1 vs. $1.8 \pm 0.7\%$, $P < 0.04$). Similar measurements using sublingual nitroglycerine showed no changes. Researchers concluded that oral L-Arginine supplementation does indeed improve endothelium-dependent dilatation and reduces monocyte/endothelial cell adhesion in young men with coronary artery disease.

Known Benefits of L-Arginine Supplementation

The following list provided by Drs Fried and Merrell³³⁰ and

others highlights many of the known benefits of L-Arginine supplementation and the subsequent ADNO production.

- It relaxes arterial smooth muscles and helps to maintain normal blood pressure, lowering both systolic and diastolic blood pressure.³³¹
- It enhances the coronary artery supply blood to the heart thereby preventing angina.
- It enhances blood flow to the penis helping to overcome impotence.
- It increases cardiac output in severe CHF patients by decreasing systemic vascular resistance.³³²
- It significantly attenuates the development of hypertension and the progression of renal insufficiency in chronic renal failure.³³³
- It has an important role in controlling heart rate. It contributes to the cholinergic antagonism of the positive chronotropic response to adrenergic stimulation.³³⁴
- It reduces adhesion of monocytes to endothelial cells, which is one of the initial factors leading to atherosclerosis.³³⁵
- It prevents endothelial damage in patients with various cardiovascular risk factors such as hypercholesterolemia and lipid profile, smoking, hypertension diabetes and advanced age.^{336, 337}
- It mitigates the effects of second hand smoke: endothelial dysfunction, increased adrenergic responsiveness and atherogenesis in the hypercholesterolemics³³⁸
- It helps to restore endothelial function in several chronic cardiovascular disorders such as coronary, peripheral and

cerebral vascular disease, mild-to-moderate congestive heart failure, stroke, ischemia, myocardial infarction, renal disease, portal hypertension, and impotence.^{339, 340}

- It is effective for the treatment and restoration of acute, life threatening disorders such as pulmonary hypertension and preeclampsia.^{341, 342, 343}
- It is effective for the treatment and recovery from vascular surgery, angioplasty, coronary bypass grafting and cardiac transplantation.^{344, 345}
- It helps to lower total serum cholesterol and prevent the LDL cholesterol from oxidizing.
- It is an anticoagulant that helps prevent blood platelet aggregation that can cause heart attack and stroke.
- It is a free-radical scavenger and enhances the immune system.
- It is necessary for the healing process after major burn.³⁴⁶
- It helps the healing and recovery process after various major surgeries.³⁴⁷
- It is crucial for different immune-system cells for killing foreign bacteria and virus and to shrink or destroy some cancerous tumors.
- It is necessary to encode long-term memory and ensure blood flow to brain cells.
- It functions as a messenger molecule, allowing nerve cells in the body and the brain to communicate with each other.
- It may help regulate insulin secretion by the pancreas thereby reducing the risk of diabetes.

- It relaxes hypertonic sphincter muscles, preventing and healing hemorrhoids and anal fissures.
- It stimulates the body to release human growth hormone (HGH), a key to longevity, boosting lean muscle mass, bone density and decreasing fat tissue.

Studies are currently investigating the benefits of L-Arginine for treating other disorders as well:

- It may be an effective therapy to aid in the treatment of sickle cell disease.³⁴⁸
- It may be an effective therapy to aid in the treatment of herpesvirus type-1.³⁴⁹
- It may be an effective therapy for stroke victims. In controlled studies, L-Arginine delays the development of ischemic injury by retarding cytotoxic brain edema during focal cerebral ischemia and improved blood supply to the ischemic tissues. And it reduced infarction volume of distal to middle cerebral artery occlusion in spontaneously hypertensive rats.^{350, 351}
- Conversely, the L-Arginine analogue L-NMMA has even proved effective for the treatment and restoration of the acute life threatening disorder of cardiogenic shock.³⁵²

The evidence is simply overwhelming. Sundry studies demonstrate the beneficial effects of L-Arginine supplementation. When endothelium cannot release NOS properly or in sufficient quality to maintain adequate ADNO levels, whether due to a lack of arginine supply or damaged endothelium, oral L-Arginine supplementation facilitates ADNO production. For these individuals L-Arginine is indeed essential.

Appendix B

Oral L-Arginine, Dietary and Lifestyle Changes

Some have questioned, theoretically, if arginine might be contraindicated in certain disorders such as depression, autoimmune disorders, AIDS, cirrhosis, breast cancer and for administration immediately post CVA. At present, more research is needed in these areas and caution is advised. And L-Arginine should be avoided in combination with other potent vasodilators such as Viagra.³⁵³ Otherwise, barring a history of migraine headache or rare medical conditions for which vasodilation is not advised, there are no known contraindications for L-Arginine supplementation. Controlled studies have used various amounts from 1 to 35 grams/day without adverse effects.^{354,355} This is a simple amino acid that is both normally and continuously synthesized by the body and consumed in daily diet—

on average about 5 to 6 grams/day from various protein sources: meat, dairy products, eggs, nuts, potatoes, etc.³⁵⁶ Additional oral supplementation is considered a very safe and necessary therapy for cardiovascular dysfunction.^{357,358,359}

As a dietary supplement, L-Arginine should be taken TID or QID, thereby keeping a constant supply in the system. Researchers recommend starting with a low dose such a 3 to 6 grams/day and titrating as needed to achieve the desired effect, which could take up to a few weeks. Because some might experience an upset stomach it has been suggested by some take L-Arginine should be taken with a carbohydrate. However, because L-Arginine is an amino acid avoid taking it with proteins that could displace it and inhibit absorption.³⁶⁰

Effectively, for the cardiovascular system, L-Arginine works as a vasodilator, lipid control agent, anticoagulant and free-radical scavenger. There are other, important natural remedies for hypertension as well. Not the least of which are losing weight (if applicable), avoiding tobacco, caffeine, alcohol, table salt and foods with a high inorganic sodium chloride content. Some herbs elevate the blood pressure and should be avoided as well: for example, licorice, ma hung (ephedra).³⁶¹

For many years, we have known that 2 or 3 gloves of garlic a day will lower high blood pressure. It affects the autonomic nervous system and has hypolipidaemic properties that can lower the systolic pressure by 20-30 mmHg and the diastolic by 10-20 mm Hg. Onions have similar effects on the lipids levels and the blood pressure.³⁶²

Foods rich in potassium, magnesium and calcium are essential for hypertension. Because mineral deficiencies have been linked to hypertension, supplements may be necessary. Other herbs have proven beneficial for hypertension: cayenne, chamomile, fennel, hawthorn berries, parsley and rosemary. Flaxseed, olive and primrose oil contain essential Omega-3 fatty acids that improve circulation, lower cholesterol and help lower blood pressure.³⁶³

Lifestyle cannot be underestimated when dealing with hypertension. Most cases can be corrected with diet and exercise. Indeed, this disorder is primarily associated with the western diet, found almost exclusively in developed countries.³⁶⁴ Stress is another factor that cannot be overlooked. Some researchers have suggested that stress is related to 80% of major illnesses.³⁶⁵

Another issue that must be considered when dealing with hypertension is heavy metal toxicity.³⁶⁶ Chronic exposure to metals such as lead in contaminated drinking water or cadmium in cigarette smoke can be a contributing and even primary cause of hypertension as they clog the arteries and inhibit vessel elasticity.

Along with avoiding exposure, supplemental chelating agents can be taken to rid these toxins from the body. They will simultaneously remove calcium deposits and blood fats as well.³⁶⁷ Oral chelation is safe.³⁶⁸ As you can see, some of the more potent and popular agents are merely alfalfa, the amino acids cysteine and glutathione, the minerals manganese, selenium, potassium and zinc, and the antioxidant vitamins C and E.

Aside from being potent antioxidants, vitamins C & E have direct cardiovascular benefits. 1,000 mg a day of vitamin C itself can significantly lower blood pressure. 500 mg a day of vitamin E reduces the risk of heart attack.³⁶⁹

Appendix C

L-Arginine Case Studies

L-Arginine has proved to be a safe and effective treatment for hypertension. Recently I tracked the results of eight consecutive persons who sought alternative methods for dealing with their cardiovascular issues.

Interestingly, each individual was an allopathic healthcare professionals or the family member thereof. Some had already tried and rejected the standard allopathic treatments; others were still being treated by allopathy. Others still were being pressured by their physician to begin treatment. Those who had experienced the allopathic treatments found the side effects too frustrating. Those who had not yet tried these drugs were very concerned about these known side effects.

Although anecdotal, these particular case studies demonstrate the potency of L-Arginine supplementation to lower blood pressure, regulate lipid levels and reverse impotence—even without the customary recommended changes in diet and lifestyle. Although specific dietary and lifestyle changes are generally recommended, these volunteers only followed the L-Arginine supplementation advice. Nevertheless, the results were significant. Each individual experienced hemodynamic stability, lipid control and/or sexual potency, as pertaining to his/her particular situation.

Case #1

A 43-year old white male, grossly overweight at 260 lbs, moderately active. An allopathic physician diagnosed stage-III hypertension, told him to lose weight and placed him on a calcium channel blocker. After several months, he had lost no weight and the medicated condition had reversed to stage-I hypertension. However the side effects of the medication were severe: excessive sleep, 10 to 12 hours per night, daytime lethargy and impotence.

At this time, he sought alternative methods for dealing with the hypertension. He began 2 gm of L-Arginine taken three times a day, for a total of 6 grams/day. By the end of the second week he reported that he had weaned himself from the calcium channel blocker and that BP was normal—actually lower than it had been for several months on the prescribed medication. The medication's side effects were also subsiding and by the end of the fourth week, erectile function had completely returned to normal. At 1, 2, 3 & 6 months there had been no weight loss, yet BP remained normal and there were no side effects.

Case #2

A very active 42-year old white male, 190 lbs, diagnosed by an

allopathic physician with stage-I hypertension. After several months of the prescribed medication (an alpha blocking agent), he was experiencing bouts of impotence. He sought an alternative therapy.

He began taking 1 gm of L-Arginine twice a day for a total of 2 grams/day. After 3 weeks of L-Arginine supplementation, BP remained normal and the bouts of impotence had subsided. At this time he began to decrease his hypertension medication. By the fifth week he had stopped taking the medication and the BP remained normal. At 2, 3 & 6 months the BP and potency remained normal.

Case #3

A moderately active 53-year old white male, slightly overweight at 210 lbs, diagnosed by an allopathic physician with a long history of stage-I hypertension and extremely high cholesterol. Although the hypertension was under control by medication, the cholesterol remained high and he experienced bouts of impotence from anti-hypertensive medication.

Remaining on his prescribed medication, he began taking 2 gm of L-Arginine three times a day, for a total of 6 grams/day. Within 1 week he reported significant improvement in erectile function. 1 and 2 months later this improvement remained. Laboratory tests performed after 3 months showed that cholesterol had dropped significantly.

Case #4

A moderately active white female in early fifties, about 150 lbs, with a recent history of mild hypertension; as yet not being treated by medication. She began taking 1 gm of L-Arginine every morning, for a total of 1 gm/day. Within 1 week she reported BP had returned to normal. At 1, 2, 3 & 6 months, BP remained normal.

Case #5

A very active 40-year old white male, 180 lbs, with a recent history of mild hypertension; as yet not being treated by medication. He began taking 500 mg of L-Arginine TID, for a total of 1.5 grams/day. Within 1 week he reported BP had returned to normal. At 1, 2, 3 & 6 months, BP remained normal.

Case #6

A white male in late 50's, about 160 lbs, with limited active, diagnosed by an allopathic physician with stage 1 hypertension. He was hesitant to begin prescribed medications because of the numerous side effects. His specific concern was impotence. He began taking 1 gm of L-Arginine four times a day for a total of 4 grams/day. After 1 week of L-Arginine supplementation, BP had returned to normal limits. At 1, 2, 3 & 6 months BP remained normal.

Case #7

A white male in early 60's, about 150 lbs., with limited active, diagnosed by an allopathic physician with mild hypertension and advised to begin medication. Like others, he was hesitant to begin the prescribed medication because of the numerous of side effects. He began taking 1 gm of L-Arginine four times a day for a total of 4 grams/day. After 1 week of L-Arginine supplementation, BP had returned to normal limits. At 1, 2, 3 & 6 months BP remained normal.

Case #8

A white male, in mid 60's, about 140 lbs, with limited active, who had been treated for hypertension for many years and experienced the usual side effects including impotence. He remained

on his medication and began taking 1 gm of L-Arginine four times a day for a total of 4 grams/day. After 1 week of L-Arginine supplementation, erectile function began to return. At 1, 2, & 3 months erectile function was near normal.

L-Arginine can be neglected no longer as an essential therapy for cardiovascular disease. For any clinician to do so is dishonest. At the very least, it is irresponsible.

ENDNOTES

1. Berger Stuart M. What your Doctor Didn't Learn in Medical School. New York, NY: Avon Books; 1988, p 16.
2. Bates, Richard C. This Proud Profession Must Heal Itself. Medical Economics, General Surgery. 1998 June;17(11):812.
3. Bates, Ibid.
4. Bates, Ibid.
5. Holford Patrick. The Optimum Nutrition Bible. Freedom, CA: The Crossing Press; 1999, p2.
6. Guglielmo Wayne J. The uneasy balance of doctors and their machines. Medical Economics - General surgery. 1998 Nov/Dec;17(11):20-28.
7. Atkins Robert C. Dr. Atkins' Health Revolution. New York, NY: McKay; 1972, p20.

-
8. Guglielmo Ibid.
 9. Braddock III Clarence H, Edwards Kelly A, Hasenberg Nicole M, Laidley Tracy L, Levinson Wendy. Informed Decision Making in Outpatient Practice: Time to Get Back to Basics. JAMA. 1999 Dec, 22/29;282:2313.
 10. Barry Michael J. Involving Patients in Medical Decisions How Can Physicians Do Better? JAMA. 1999;282:2313-2320.
 11. Reuters/News Rounds, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 16, 2001.
 12. Williams David G. How to cancer proof every cell in your body. Alternatives for the Health Conscious Individual. Mountain Home Publishing, no date, pp1-8.
 13. Ballentine Rudolph. Diet and Nutrition. Honesdale, PA: The Himalayan International Institute; 1978. pp165-6, 347-8, 357-8.
 14. Holford Patrick. The Optimum Nutrition Bible. Freedom, CA: The Crossing Press; 1999, p278.
 15. Frahm Anne and Frahm David. A Cancer Battle Plan. New York, NY: Penguin Putnam Inc.; 1992, pp45-106.
 16. Jensen Bernard. The science and Practice of Iridology. 25th edition; Escondido, CA: Bernard Jensen International; 1998.
 17. Nagourney, New York Times, as reported by Healthcare Advisory Board. <http://www.advisory.com>. Health Advisory Board, May 22, 2001.
 18. Asthma Coalition Report on State of Asthma in U.S. at Official U.S. World Asthma Day Press Conference. NHLBI Communications. <http://www.nhlbi.nih.gov>. May 3, 2000.
 19. Lancot Guilaine. The Medical Mafia: How To Get Out of It

Alive and Take Back Our Health and Wealth. Waterloo, Quebec: Here's The Key; 1995, p83.

20. Atkins, p13.

21. Barry, Ibid.

22. Lewers T D. JAMA. 2000 June 5 editorial.

23. Berger, pp2-3.

24. Berger, p5.

25. Berger, pp2-3.

26. Berger, p13.

27. Inlander Charles B, Levin Lowell S, Weiner Ed. Medicine on trial: the appalling story of ineptitude, malfeasance, neglect, and arrogance that overlooks it. New York, NY: Pantheon Books; 1988, pp73-4.

28. Medical College of Georgia website.<http://www.mcg.edu>.

29. Meharry Medical College School of Medicine website
<http://www.mmc.edu>.

30. University of North Dakota School of Medicine website
<http://www.med.und.nodak.edu>.

31. Medical College of Ohio website <http://www.mco.edu>.

32. McPhee, Stephen J. Medicine. 1996 Jan; 75(1):41.

33. Inlander, p74.

34. Jensen Bernard. Ibid. p.ix.

-
35. Kirch Wilhelm and Schafii Christine. Misdiagnosis at a University Hospital in 4 Medical Eras Report on 400 Cases. *MEDICINE*. 1996;75(1):29-35.
36. Harding, T. Swann. *Forum*. June, 1929, p348.
37. Kirch, *Ibid*.
38. Gut A L, Ferreira A L and Montenegro M R. *Journal of Nursing*. 1993 Jul;8-21;2(13):655-656.
39. Tai Dy, El-Bilbeisi H, Tewari S, Mascha E J, Wiedemann H P and Arroliga A C. *Chest* 2001 Feb;119(2):530-536.
40. Kirch, *Ibid*.
41. Mendelsohn Robert S. *Confessions of a Medical Heretic*. Chicago, IL: Contemporary Books; 1979. p1.
42. Chassin, *Ibid*.
43. Mendelsohn, p.xiii.
44. Chassin Mark R, Galvin Robert W. The urgent need to improve healthcare quality. *JAMA* 1998 Sep;280,11,1000.
45. Chassin, p1004.
46. Kirch, *Ibid*.
47. Forster, Jeff. *Tales from the Dark Side of Medicine*. Medical Economics, General Surgery Edition. 1998 Nov/Dec;17(11):40-42..
48. New York Physicians. Healthcare Advisory Board. <http://www.advisory.com>. March 27, 2001.
49. Gormley, AP Newswires, 12/22/03: Physician discipline: States consider

tougher rules for problem doctors <http://www.advisory.com>. Feb, 26, 2004.

50. Average MD generates \$1.5 million per year for affiliated hospital. Healthcare Advisory Board. <http://www.advisory.com>. March 15, 2002.

51. New York Physicians. Healthcare Advisory Board. <http://www.advisory.com>. March 27, 2001.

52. Robert Wood Johnson Foundation survey. Healthcare Advisory Board. <http://www.advisory.com>. Sep, 2001.

53. Allen, Los Angeles Times, 5/22, as reported by the Healthcare Advisory Board. <http://www.advisory.com>. Dec 5, 2000.

54. Tipton William Jr., Executive Vice President, AACS, as reported by Healthcare Advisory Board, Healthcare Advisory Board. <http://www.advisory.com>. Dec. 15, 2000.

55. Tipton, Ibid.

56. Brook Robert H. Managed care is not the problem, quality is. JAMA.1997 Nov,19;278(19):1612-1614.

57. Angell Marcia, NEJM, as reported by Healthcare Advisory Board, <http://www.advisory.com>. June 22, 2000.

58. Wallace Jim, Charleston Daily Mail Capitol, as reported by Healthcare Advisory Board, <http://www.advisory.com>. Feb 23, 2001.

59. HHS in 2000: A Year of Achievements. Health and Human Services. <http://www.hhs.gov/search/press.html>. Dec 31, 2000.

60. Look-alike, sound-alike drug names. Sentinel Event Alert. Issue 19, May 2001.

61. Mary Frei, Record Capitol, Drug plan stirs debate, as reported by Healthcare Advisory Board, <http://www.advisory.com>.

-
62. NIH for Healthcare Management, as reported by Healthcare Advisory Board, [http:// www.advisory.com](http://www.advisory.com). May 8, 2001.
63. New York Times, Grady, as reported by Healthcare Advisory Board, <http://www.advisory.com>. Dec 28, 2000.
64. Gonzales Ralph, Steiner John F, and Sande Merle A. Antibiotic prescribing for adults with colds, upper respiratory tract infections, and bronchitis by ambulatory care physicians. JAMA. 1997 Sep,17;278(11):901-904.
65. Schwartz, Benjamin. Preventing the emergence of antimicrobial resistance - A call for action by public health officials, and patients. JAMA. 1997 Sep,17;278(11):944-45.
66. Toppo, Associated Press, as reported by Healthcare Advisory Board, <http://www.advisory.com>. July 31, 2000.
67. New York Physician considered controversial for curtailing drug use. Walls Street Journal, as reported by Healthcare Advisory Board. com. June 22, 2001.
68. Holford, Ibid. p25.
69. Payer Lynn. Disease Mongers - How Doctors, Drug Companies, and Insurers Are Making You Feel Sick. New York, NY: John Wiley & Sons, Inc. 1992, p 65.
70. Wall Street Journal as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 22, 2001.
71. Trenton, NJ. as reported by Healthcare Advisory Board. <http://www.advisory.com>. June 01, 2001.
72. Holford. Ibid. p3.
73. Williams, p2.

-
74. Boston Globe, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 22, 2001.
75. Wallace, Ibid.
76. Payer, p66.
77. Payer, p66.
78. Payer, p67.
79. Payer, p68.
80. NIH for Healthcare Management, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 8, 2001.
81. Atkins, p27.
82. Mendelsohn Robert S. Confessions of a Medical Heretic. Chicago, IL: Contemporary Books; 1979.
83. Lanctot, Ibid.
84. Day Lorraine. Drugs NEVER Cure Disease! They only cover up the symptoms. Palm Springs, CA: Prine Com.
85. Ballentine, Ibid.
86. Berger Stuart M. What your Doctor Didn't Learn in Medical School. New York, NY: Avon Books; 1988.
87. Atkins, p43.
88. Atkins, pp26-27.
89. Atkins, pp26-27.
90. Payer, p69.

-
91. Wall Street Journal as reported by the Healthcare Advisory Board. <http://www.advisory.com>. May 22, 2001.
92. Payer, p66.
93. Angell Marcia, as reported by Healthcare Advisory Board. <http://www.advisory.com>. Feb 24, 2001.
94. Monmaney, as reported by Healthcare Advisory Board, <http://www.advisory.com>. Feb 24, 2001.
95. Chicago Tribune, Gorner, as reported by Healthcare Advisory Board. <http://www.advisory.com>. 2001.
96. Angell Marcia, NEJM June 22, editorial, as reported by Healthcare Advisory Board. <http://www.advisory.com>. June, 2000.
97. Angell Marcia and Relman Arnold, Washington Post, as reported by Healthcare Advisory Board. <http://www.advisory.com>. June, 21, 2001.
98. Wall Street Journal, Association of Medical Publications, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 22, 2001.
99. Angell Marcia, NEJM June 22, editorial, as reported by Healthcare Advisory Board. <http://www.advisory.com>. June, 2000.
100. Miami Herald, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 15, 2001.
101. Wall Street Journal, Guidera/Harris, as reported by Healthcare Advisory Board. <http://www.advisory.com>. Dec 7, 2000.
102. Fields, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 15, 2001.

-
103. Wall Street Journal, Gold, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May, 15, 2001.
104. AP/New York Times, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 15, 2001.
105. Journal, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May 15, 2001.
106. Wall Street Journal, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May, 15, 2001.
107. Wigfield/Wilke, as reported by Healthcare Advisory Board. <http://www.advisory.com>. May,15, 2001.
108. Wallace, Ibid.
109. Angell Marcia, NEJM 6/22 editorial, as reported by Healthcare Advisory Board. <http://www.advisory.com>. June, 2000.
110. Wallace, Ibid.
111. Chassin and Galvin. Need to Improve Healthcare Quality JAMA. 1998 Sep,16;280(11):989-996.
112. Wallace, Ibid.
113. Toppo, Ibid.
114. Are the elderly being over-medicated? Wall Street Journal as reported by Healthcare Advisory Board. <http://www.advisory.com>. June 22, 2001.
115. Wallace, Ibid.
116. Chassin, Ibid.
117. Atkins, p36.

-
118. Nichols Joe D. Please Doctor Do Something. (6th ed.); Atlanta, TX: Joe Nichols, 1979, p12.
119. 2001 Heart and Stroke Statistical Update http://www.americanheart.org/catalog/Scientific_catpage70.html Cardiovascular Diseases, ICD/9 390—459, 745—747.
120. American Heart Association. Heart and Stroke Statistical Update http://www.americanheart.org/catalog/Scientific_catpage70.html Cardiovascular Diseases, ICD/9 390—459, 745—747, 2001.
121. Tierney Jr Lawrence M, McPhee Stephen J, and Papadakis Maxine A. (eds). Current Medical Diagnosis and Treatment. 3rd ed; Appleton & Lang, 1995, p373.
122. Sciuillo Linda M ans Wade Sherryl D. (ed.) High Blood Pressure Lowered Naturally - Your Arteries Can Clean Themselves. 7th ed.; Peachtree City, GA: 1998, p206.
123. American Heart Association. Heart and Stroke Statistical Update http://www.americanheart.org/catalog/Scientific_catpage70.html. Congestive Heart Failure, ICD/9 428.0, 2001.
124. Healthcare Advisory Board. Evidence-based practices. 1999 Jan; Catalog No.:001-221-519, p2.
125. American Heart Association. 1 National Health and Nutrition Examination Survey III. http://www.americanheart.org/catalog/Scientific_catpage70.html. 1988—94.
126. Elixhauser A, Klemstine K, Steiner C, Bierman A. Procedures in U.S. Hospitals, 1997. HCUP Fact Book No.2. Rockville, MD: Agency for Healthcare Research and Quality; 2001, p 3.
127. American Heart Association. Heart and Stroke Statistical Update http://www.americanheart.org/catalog/Scientific_catpage70.html. Cardiovascular Diseases, ICD/9 390—459, 745—

747, 2001.

128. National Hospital Ambulatory Medical Care Survey. American Heart Association. Heart and Stroke Statistical Update http://www.americanheart.org/catalog/Scientific_catpage70.html. Cardiovascular Diseases, ICD/9 390—459, 745—747, 2001.

129. Elixhauser, pp7-20.

130. Toppo, Ibid.

131. 1997 National Nursing Home Survey. Health and Human Services. American Heart Association. Heart and Stroke Statistical Update http://www.americanheart.org/catalog/Scientific_catpage70.html. Cardiovascular Diseases, ICD/9 390—459, 745—747, 2001.

132. McGeeveran William A. The World Almanac and Book of Facts. Mahwah, NJ: World Almanac Books; 2001, p368.

133. Studies Underscore Need for Early, Aggressive Hypertension Treatment. National Heart, Blood and Lung Institute. <http://www.nhbli.nih.gov/nhlbi.htm>. May 21, 1996.

134. Studies Underscore Need for Early, Aggressive Hypertension Treatment. National Heart, Blood and Lung Institute. <http://www.nhbli.nih.gov/nhlbi.htm>. May 21, 1996.

135. Giner Munoz M Seccion de Alergia, and Inmunologia Clinica. Exhaled nitric oxide. Allergol Immunopathol (Madr) 2000 May-Jun;28(3):124-35.

136. Fried, Robert and Merrell, Woodson. The Arginine Solution. New York, NY: Warner Books; 1999, pp67-74.

137. Moncada S. The first Robert Furchgott lecture: from endothelium-dependent relaxation to the L-Arginine:NO pathway. Blood Vessels 1990;27(2-5):208-17.

-
138. Rabelink AJ. Nobel prize in Medicine and Physiology 1998 for the discovery of the role of nitric oxide as a signalling molecule. *Ned Tijdschr Geneesk* 1998 Dec 26;142(52):2828-30.
139. Boger RH, Bode-Boger SM, Frolich JC. Pathogenetic aspects of the L-Arginine-NO metabolic pathway in arteriosclerosis and possible therapeutic aspects. *Vasa* 1996;25(4):305-16.
140. Boger, *Ibid*.
141. Moncada, *Ibid*.
142. Fried, p4.
143. Moncada, *Ibid*.
144. Boger, *Ibid*.
145. Moncada, *Ibid*.
146. Boger, *Ibid*.
147. Dumont Y, D'Amours M, Lebel M, Lariviere R. Supplementation with a low dose of L-Arginine reduces blood pressure and endothelin-1 production in hypertensive uraemic rats. *Nephrol Dial Transplant* 2001 Apr;16(4):746-54.
148. Lund DD, Faraci FM, Miller FJ Jr, Heistad DD. Gene transfer of endothelial nitric oxide synthase improves relaxation of carotid arteries from diabetic rabbits. *Circulation* 2000 Mar 7;101(9):1027-33.
149. McAllister AS, Atkinson AB, Johnston GD, Hadden DR, Bell PM, McCance DR. Clark Sir George E. Basal nitric oxide production is impaired in offspring of patients with essential hypertension. *Clin Sci (Colch)* 1999 Aug;97(2):141-7.
150. Bocchi EA, Vilella de Moraes AV, Esteves-Filho A, Bacal F,

Auler JO, Carmona MJ, Bellotti G, Ramires AF L-Arginine reduces heart rate and improves hemodynamics in severe congestive heart failure. *Clin Cardiol* 2000 Mar;23(3):205-10.

151. Angulo J, Cuevas P, Fernandez A, Gabancho S. Combination of phentolamine and L-Arginine or sildenafil synergistically improves neurogenic relaxation of rabbit corpus cavernosum smooth muscle. *Urology* 2001 Mar;57(3):585-9.

152. Lyons D, Roy S, Patel M, Benjamin N, Swift CG. Impaired nitric oxide-mediated vasodilatation and total body nitric oxide production in healthy old age. *Clin Sci (Colch)* 1997 Dec;93(6):519-25.

153. Lane P and Gross SS. Cell signaling by nitric oxide. *Semin Nephrol* 1999 May;19(3):215-29.

154. De Caterina R. Endothelial dysfunctions: common denominators in vascular disease. *Curr Opin Clin Nutr Metab Care* 2000 Nov;3(6):453-67.

155. Tenenbaum A, Fisman EZ, Motro M L-Arginine: rediscovery in progress. *Cardiology* 1998 Dec;90(3):153-9.

156. Lane P, and Gross SS. Cell signaling by nitric oxide. *Semin Nephrol* 1999 May;19(3):215-29.

157. Wu G, Meininger CJ. Arginine nutrition and cardiovascular function. *J Nutr* 2000 Nov;130(11):2626-9.

158. PubMed on line <http://www.PubMed.com>.

159. Brown AA, Hu FB. Department of Nutrition, Harvard School of Public Health, Boston, MA Dietary modulation of endothelial function: implications for cardiovascular disease. *Am J Clin Nutr* 2001 Apr;73(4):673-86.

160. Mattei P, Viridis A, Ghiadoni L, Taddei S, Salvetti A

Endothelial function in hypertension. *J Nephrol* 1997 Jul-Aug;10(4):192-7.

161. Fried, p26.

162. de Berrazueta, *Ibid*.

163. PubMed. www.ncbi.nlm.gov/PubMed.

164. Siani A, Pagano E, Iacone R, Iacoviello L, Scopacasa F, Strazzullo P. Blood pressure and metabolic changes during dietary L-Arginine supplementation in humans. *Am J Hypertens* 2000 May;13(5 Pt 1):547-51.

165. Loscalzo Joseph. What we know and don't know about L-Arginine and NO. *Circulation* 2000 May 9;101(18):2126-9
Comment on: *Circulation*. 2000 May 9;101(18):2160-4.

166. Kaposzta Z, Baskerville PA, Madge D, Fraser S, Martin JF, Markus HS. L-Arginine and s-nitrosoglutathione reduce embolization in humans. *Circulation* 2001 May 15;103(19):2371-5.

167. Theilmeier G, Chan JR, Zalpour C, Anderson B, Wang BY, Wolf A, Tsao PS, Cooke JP. Adhesiveness of mononuclear cells in hypercholesterolemic humans is normalized by dietary L-Arginine. *Arterioscler Thromb Vasc Biol* 1997 Dec;17(12):3557-6.

168. Bode-Boger SM, Boger RH, Galland A, Tsikas D, Frolich JC. L-Arginine-induced vasodilation in healthy humans: pharmacokinetic-pharmacodynamic relationship. *Br J Clin Pharmacol* 1998 Nov;46(5):489-97.

169. Rector TS, Bank AJ, Mullen KA, Tschumperlin LK, Sih R, Pillai K, Kubo SH. Randomized, double-blind, placebo-controlled study of supplemental oral L-Arginine in patients with heart failure. *Circulation* 1996 Jun 15;93(12):2135-41.

170. Wolf A, Zalpour C, Theilmeier G, Wang BY, Ma A,

Anderson B, Tsao PS, Cooke JP. Dietary L-Arginine supplementation normalizes platelet aggregation in hypercholesterolemic humans. *J Am Coll Cardiol* 1997 Mar 1;29(3):479-85.

171. Tsao PS, McEvoy LM, Drexler H, Butcher EC, Cooke JP. Enhanced endothelial adhesiveness in hypercholesterolemia is attenuated by L-Arginine. *Circulation* 1994 May;89(5):2176-82.

172. Artigues C, Richard V, Roussel C, Lallemand F, Henry JP, Thuillez C. Increased endothelium—monocyte interactions in salt-sensitive hypertension: effect of L-Arginine. *J Cardiovasc Pharmacol* 2000 Mar;35(3):468-73.

173. Clarkson P, Adams MR, Powe AJ, Donald AE, McCredie R, Robinson J, McCarthy SN, Keech A, Celermajer DS, Deanfield JE. Oral L-Arginine improves endothelium-dependent dilation in hypercholesterolemic young adults. *J Clin Invest* 1996 Apr 15;97(8):1989-94.

174. Watanabe G, Tomiyama H, Doba N. Effects of oral administration of L-Arginine on renal function in patients with heart failure. *J Hypertens* 2000 Feb;18(2):229-34

175. Wu, Ibid.

176. Boger, Ibid.

177. Fried, p67-74.

178. Moncada Salvador. The first Robert Furchgott lecture: from endothelium-dependent relaxation to the L-Arginine:NO pathway. *Blood Vessels* 1990;27(2-5):208-17.

179. Rabelink, Ibid.

180. Massaro M, Carluccio MA, De Caterina R. Direct vascular antiatherogenic effects of oleic acid: a clue to the cardioprotective

effects of the Mediterranean diet. *Cardiologia* 1999 Jun;44(6):507-13.

181. Fried, p18.

182. US & World Report. National Academy of Science. <http://www.nas.edu>. Institute of Medicine March 1, 2001.

183. Epictetus (c. 50 B 138 A.D.). *The Golden Sayings of Epictetus*. The Harvard Classics. 1909B14.

184. Nichols, p153.

185. Fried, pp22-24.

186. Fried, pp23-25.

187. McCully K.S. *The Homocysteine Revolution*. New Canann, CT: Keats Publishing Inc., 1997.

188. Atkins, p59.

189. *A Year of Achievements*. Health and Human Services. HHS in 2000: <http://www.hhs.gov/search/press.html>. December 31, 2000.

190. Fried, pp23-25.

191. De Caterina R. Endothelial dysfunctions: common denominators in vascular disease. *Curr Opin Lipidol* 2000 Feb;11(1):9-23.

192. Fried, p18.

193. Fried, p49.

194. Marsh, *Ibid*.

-
195. Giner Munoz M Seccion de Alergia, and Inmunologia Clinica. Exhaled nitric oxide. *Allergol Immunopathol (Madr)* 2000 May-Jun;28(3):124-35.
196. Fried, pp67-74.
197. Moncada S. The first Robert Furchgott lecture: from endothelium-dependent relaxation to the L-Arginine:NO pathway. *Blood Vessels* 1990;27(2-5):208-17.
198. Rabelink AJ. Nobel Prize in Medicine and Physiology 1998 for the discovery of the role of nitric oxide as a signalling molecule. *Ned Tijdschr Geneesk* 1998 Dec 26;142(52):2828-30.
199. Boger RH, Bode-Boger SM, Frolich JC. Pathogenetic aspects of the L-Arginine-NO metabolic pathway in arteriosclerosis and possible therapeutic aspects. *Vasa* 1996;25(4):305-16.
200. Boger. *Ibid.*
201. Moncada, *Ibid.*
202. Fried, p4.
203. Moncada, *Ibid.*
204. Boger RH, Bode-Boger SM, Frolich JC. Pathogenetic aspects of the L-Arginine-NO metabolic pathway in arteriosclerosis and possible therapeutic aspects. *Vasa* 1996;25(4):305-16.
205. Moncada, *Ibid.*
206. Boger, *Ibid.*
207. Dumont Y, D'Amours M, Lebel M, Lariviere R. Supplementation with a low dose of L-Arginine reduces blood pressure and endothelin-1 production in hypertensive uraemic rats. *Nephrol Dial Transplant* 2001 Apr;16(4):746-54.

-
208. Lund DD, Faraci FM, Miller FJ Jr, Heistad DD. Gene transfer of endothelial nitric oxide synthase improves relaxation of carotid arteries from diabetic rabbits. *Circulation* 2000 Mar 7;101(9):1027-33.
209. McAllister AS, Atkinson AB, Johnston GD, Hadden DR, Bell PM, McCance DR. Basal nitric oxide production is impaired in offspring of patients with essential hypertension. *Clin Sci (Colch)* 1999 Aug;97(2):141-7.
210. Bocchi EA, Vilella de Moraes AV, Esteves-Filho A, Bacal F, Auler JO, Carmona MJ, Bellotti G, Ramires AF L-Arginine reduces heart rate and improves hemodynamics in severe congestive heart failure. *Clin Cardiol* 2000 Mar;23(3):205-10.
211. Angulo J, Cuevas P, Fernandez A, Gabancho S. Combination of phentolamine and L-Arginine or sildenafil synergistically improves neurogenic relaxation of rabbit corpus cavernosum smooth muscle. *Urology* 2001 Mar;57(3):585-9.
212. Lyons D, Roy S, Patel M, Benjamin N, Swift CG. Impaired nitric oxide-mediated vasodilatation and total body nitric oxide production in healthy old age. *Clin Sci (Colch)* 1997 Dec;93(6):519-25.
213. Palmer RM, Ashton DS, Moncada S Vascular endothelial cells synthesize nitric oxide from L-Arginine. *Nature* 1988 Jun 16;333(6174):664-6.
214. Palmer RM, Rees DD, Ashton DS, Moncada S L-Arginine is the physiological precursor for the formation of nitric oxide in endothelium-dependent relaxation. *Biochem Biophys Res Commun* 1988 Jun 30;153(3):1251-6.
215. Palmer RM, Moncada S. A novel citrulline-forming enzyme implicated in the formation of nitric oxide by vascular endothelial cells. *Biochem Biophys Res Commun* 1989 Jan 16;158(1):348-52.

216. Moncada, *Ibid.*

217. Bogle RG, Coade SB, Moncada S, Pearson JD, Mann GE. Bradykinin and ATP stimulate L-Arginine uptake and nitric oxide release in vascular endothelial cells. *Biochem Biophys Res Commun* 1991 Oct 31;180(2):926-32.

218. Jiang HB, Yoneyama H, Furukawa A, Hamamoto T, Takahara J, and Ichikawa Y. Effect of Isosorbide Dinitrate on Nitric Oxide Synthase under Hypoxia. *Pharmacology* 2001 Jan;62(1):10-16.

219. Wu, *Ibid.*

220. Mattei, *Ibid.*

221. Koglin J Pathogenetic mechanisms of cardiac allograft vasculopathy—impact of nitric oxide. *Z Kardiol* 2000;89 Suppl 9:24-7.

222. Fried, pp27-28.

223. Greenberg S, Chernin G, Shapira I, George J, Wollman Y, Laniado S, and Keren G. Captopril and L-Arginine have a synergistic cardioprotective effect in ischemic-reperfusion injury in the isolated rat heart. *J Cardiovasc Pharmacol Ther* 2000 Oct;5(4):281-90.

224. Fried, pp151-156.

225. Fried, p214.

226. Murphy Arthur L. *The Story of Medicine*. New York, NY: Airmont Books; 1954, p19.

227. Fried, p18.

228. Atkins, p23.

229. Atkins, p26.

230. Gillies, Alan. Improving the Quality of Patient Care. New York, NY: John Wiley & Sons, 1997, p19.

231. Harding, p346.

232. Panos Maesimund B. and Heimlich Jan , Homeopathic Medicine at Home. New York: Penguin Putnam, Inc.; 1980, p17-21.

233. Atkins, p31.

234. Atkins, p42.

235. Atkins, p57.

236. Webster NR, Galley HF. Nutrition in the critically ill patient. J R Coll Surg Edinb 2000 Dec;45(6):373-9.

237. Lerman A, Burnett JC Jr, Higano ST, McKinley LJ, Holmes DR Jr. Long-term L-Arginine supplementation improves small-vessel coronary endothelial function in humans. Circulation 1998 Jun 2;97(21):2123-8.

238. Yu YM, Ryan CM, Castillo L, Lu XM, Beaumier L, Tompkins RG, Young VR. Arginine and ornithine kinetics in severely burned patients: increased rate of arginine disposal. Am J Physiol Endocrinol Metab 2001 Mar;280(3):E509-17.

239. Brown, Ibid.

240. Berger, p17.

241. Atkins, p42-43.

242. Mendelsohn Robert S. Confessions of a Medical Heretic. Chicago, IL: Contemporary Books; 1979, p.iii.

232

-
243. Harding, p346.
244. Haney, AP/Nando Times, 3/9, as reported by Healthcare Advisory Board. <http://www.advisory.com>.
245. Adverse Drug Events in Nursing Homes: Common and Preventable, Embargoed by American Journal of Medicine, August 9, 2000, NIH <http://www.nih.gov>.
246. Coile Jr Russell C. Quality Pays: A Case for Improving Clinical Care and Reducing Medical Errors. *Journal of Healthcare Management*. 2001 May/June,46(3):156-161.
247. Berger, p5.
248. Sciallo, pp205-206.
249. Balch James F and Balch Phyllis A. *Perscription for Natural Healing*. 2nd ed.; Garden City Park, NY: Avery Publishing Group, 1997, pp320-4.
250. Aggressive Hypertension Treatment. National Heart, Blood and Lung Institute. Studies Underscore Need for Early, <http://www.nhlbi.nih.gov/nhlbi.htm>. May 21, 1996.
251. Mendelsohn Robert S. *Confessions of a Medical Heretic*. Chicago, IL: Contemporary Books; 1979, p25.
252. Tierney, pp373-90.
253. Padma-Nathan H, Steers WD, Wicker PA. Efficacy and safety of oral sildenafil in the treatment of erectile dysfunction: a double-blind, placebo-controlled study of 329 patients. *Sildenafil Study Group. Int J Clin Pract* 1998 Sep;52(6):375-9 Comment in: *Int J Clin Pract*. 1998 Sep;52(6):359.
254. Weinmann W, Bohnert M, Wiedemann A, Renz M, Lehmann N, Pollak S. Post-mortem detection and identification of sildenafil

(Viagra) and its metabolites by LC/MS and LC/MS/MS. Int J Legal Med 2001;114(4-5):252-8.

255. Bush HS. Safe use of sildenafil in patients with coronary artery disease. Cleve Clin J Med 2001 Apr;68(4):349, 352.

256. <http://www.RxList.com>.

257. <http://www.RxList.com>.

258. Harrison's T R (ed.). Principles of Internal Medicine. 7th ed.; New York, NY: McGraw-Hill Book Company; 1974, p615.

259. Tierney, p700.

260. Atkins, p23.

261. Berger, pp22-23.

262. Atkins, p39.

263. Public Citizen asks FDA for black box warnings on five statins. Healthcare Advisory Board. <http://www.advisory.com>. August 21, 2001.

264. Berger, p18.

265. Berger, p21.

266. Inlander, p135.

267. Gofman John. Radiation from medical procedures in the pathogenesis of cancer and ischemic heart disease. San Francisco: Committee for Nuclear Responsibility;1999.

268. FDA Web site <ftp://www.fda.gov/vm.cfsan.fda.gov/~lrd/history1.html>.

269. Kusuhi, Michio. The Cancer Prevention Diet. New York, NY:

St. Martin's Press; 1985. p257.

270. Nichols, p.iii.

271. Nichols, pp84-85.

272. Morter Ted. Health and Wellness. Hollywood, FL: Fredrick Fell Publisher, Inc.; 2000. pp122-3.

273. Nichols, pp77-78.

274. Ballintine, pp91-98.

275. Nichols, p79.

276. Ballintine, p101.

277. Thomas, L. Mortality from arteriosclerotic disease and consumption of hydrogenated oils and fats. Brit J Prev Soc Med 29:1975, pp82-90.

278. Nichols, p78.

279. Ballintine, p99.

280. Ballintine, pp99-100.

281. Nichols, p80.

282. Brown, Ibid.

283. Nichols, pp81-83.

284. Nichols, pp71-72.

285. Nichols, p78.

286. Reuters, The Morning Call, Easton, PA, June 2, 2001.

287. Shochat Stephen J, Fremgen Amy M, Murphy Sharon B, Hutchison Carol, Donaldson Sarah S, Haase Gerald M, Provisor Arthur J, Clive-Bumpus Rosemarie E, Winchester David P. Childhood Cancer: Patterns of Protocol Participation in a National Survey. CA Cancer J Clin 2001;51:119-130.

288. A Strategic Plan for the Department of Health and Human Services. Action Against Asthma <http://aspe.hhs.gov/sp/asthma/overview.htm#epidemic>. May 2000.

289. Type 1 Diabetes Facts. NIH http://www.jdrf.org/living_w_diabetes/homepage.php.

290. Sipes, as quoted by Nichols. Nichols, p154.

291. Ballintine, pp15-21.

292. Massaro, Ibid.

293. Atkins, p39.

294. FDA, Ibid.

295. FDA, Ibid.

296. FDA, Ibid.

297. Nichols, Ibid. p about the author.

298. Nichols, p15.

299. Nichols, pp9-16.

300. Brown, Ibid.

301. Tessier C, Corda B, Marty J. Wasting and postoperative infection in cancer patients. Pathol Biol (Paris) 2000 Oct;48(8):725-32.

302. Vazquez Martinez C. New nutrients in enteral nutrition. *Nutr Hosp* 2000;15 Suppl 1:69-74.

303. Watanabe, *Ibid*.

304. Massaro M, Carluccio MA, De Caterina R. Direct vascular antiatherogenic effects of oleic acid: a clue to the cardioprotective effects of the Mediterranean diet. *Cardiologia* 1999 Jun;44(6):507-13.

305. Blum A, Hathaway L, Mincemoyer R, Schenke WH, Kirby M, Csako G, Waclawiw MA, Panza JA, Cannon RO 3rd. Oral L-Arginine in patients with coronary artery disease on medical management. *Circulation* 2000 May 9;101(18):2160-4.

306. Atkins, *Ibid*.

307. Adams Mark R, Jessup Wendy, Hailstones Deborah, Celermajer David S. L-Arginine Reduces Human Monocyte Adhesion to Vascular Endothelium and Endothelial Expression of Cell Adhesion Molecules. *Circulation* 1997;95:662-668.

308. Loscalzo, *Ibid*.

309. Zutphen Elderly Study, reported in the September 2000, edition of *Arteriosclerosis, Thrombosis, and Vascular Biology*, a publication of the American Heart Association.

310. Fried, p7.

311. Fried, p7.

312. Adams, *Ibid*.

313. Lerman A, Burnett JC Jr, Higano ST, McKinley LJ, Holmes DR Jr. Long-term L-Arginine supplementation improves small-vessel coronary endothelial function in humans. *Circulation* 1998 Jun 2;97(21):2123-8.

314. Yu YM, Ryan CM, Castillo L, Lu XM, Beaumier L, Tompkins RG, Young VR. Arginine and ornithine kinetics in severely burned patients: increased rate of arginine disposal. *Am J Physiol Endocrinol Metab* 2001 Mar;280(3):E509-17.

315. Galban C, Montejo JC, Mesejo A, Marco P, Celaya S, Sanchez-Segura JM, Farre M, Bryg DJ. An immune-enhancing enteral diet reduces mortality rate and episodes of bacteremia in septic intensive care unit patients. *Crit Care Med* 2000 Mar;28(3):643-8 Comment in: *Crit Care Med*. 2000 Mar;28(3):884-5.

316. Gianotti L, Braga M, Gentilini O, Balzano G, Zerbi A, Di Carlo V. Artificial nutrition after pancreaticoduodenectomy. *Pancreas* 2000 Nov;21(4):344-51.

317. Gianotti, *Ibid*.

318. Fried, Robert and Merrell, Woodson. *The Arginine Solution*. New York, NY: Warner Books; 1999, p54.

319. Fried, p7.

320. Sodeman W A and Sodeman T M, *Pathological Physiology*. 6th ed.; Philadelphia: W. B. Sanders, 1979.

321. Bogle RG, Coade SB, Moncada S, Pearson JD, Mann GE. Bradykinin and ATP stimulate L-Arginine uptake and nitric oxide release in vascular endothelial cells. *Biochem Biophys Res Commun* 1991 Oct 31;180(2):926-32.

322. Brown AA, Hu FB. Dietary modulation of endothelial function: implications for cardiovascular disease. *Am J Clin Nutr* 2001 Apr;73(4):673-86.

323. Mattei, *Ibid*.

324. Berkenboom G, Crasset V, Giot C, Unger P, Vachieri JL,

LeClerc JL. Endothelial function of internal mammary artery in patients with coronary artery disease and in cardiac transplant recipients. *Am Heart J* 1998 Mar;135(3):488-94.

325. Quyyumi AA, Dakak N, Diodati JG, Gilligan DM, Panza JA, Cannon RO 3rd. Effect of L-Arginine on human coronary endothelium-dependent and physiologic vasodilation. *J Am Coll Cardiol* 1997 Nov 1;30(5):1220-7.

326. Bocchi EA, Vilella de Moraes AV, Esteves-Filho A, Bacal F, Auler JO, Carmona MJ, Bellotti G, Ramires AF. L-Arginine reduces heart rate and improves hemodynamics in severe congestive heart failure. *Clin Cardiol* 2000 Mar;23(3):205-10.

327. Hutchison SJ, Sudhir K, Sievers RE, Zhu BQ, Sun YP, Chou TM, Chatterjee K, Deedwania PC, Cooke JP, Glantz SA, Parmley WW. Effects of L-Arginine on atherogenesis and endothelial dysfunction due to secondhand smoke. *Hypertension* 1999 Jul;34(1):44-50.

328. Siani, *Ibid*.

329. Adams MR, McCredie R, Jessup W, Robinson J, Sullivan D, Celermajer DS. Oral L-Arginine improves endothelium-dependent dilatation and reduces monocyte adhesion to endothelial cells in young men with coronary artery disease. *Atherosclerosis* 1997 Mar 21;129(2):261-9.

330. Fried, pp5-6.

331. Bocchi, *Ibid*.

332. Bocchi, *Ibid*.

333. Dumont, *Ibid*.

334. Nahavandi A, Dehpour AR, Mani AR, Homayounfar H, Abdoli A, and Abdolhoseini MR. The role of nitric oxide in

bradycardia of rats with obstructive cholestasis. *Eur J Pharmacol* 2001 May;411(1-2):135-141.

335. Artigues, *Ibid.*

336. Lerman, *Ibid.*

337. Landmesser U, Hornig B, Drexler H. Endothelial dysfunction in hypercholesterolemia: mechanisms, pathophysiological importance, and therapeutic interventions. *Semin Thromb Hemost* 2000;26(5):529-37.

338. Hutchison, *Ibid.*

339. Brown, *Ibid.*

340. Mattei, *Ibid.*

341. Neri I, Piccinini F, Marietta M, Facchinetti F, Volpe A. Platelet responsiveness to L-Arginine in hypertensive disorders of pregnancy. *Hypertens Pregnancy* 2000;19(3):323-30.

342. Neri I, Marietta M, Piccinini F, Volpe A, Facchinetti F. The L-Arginine-nitric oxide system regulates platelet aggregation in pregnancy. *J Soc Gynecol Investig* 1998 Jul-Aug;5(4):192-6.

343. Facchinetti F, Neri I, Piccinini F, Marietta M, Torelli U, Bruschetini PL, Volpe A. Effect of L-Arginine load on platelet aggregation: a comparison between normotensive and preeclampsia pregnant women. *Acta Obstet Gynecol Scand* 1999 Jul;78(6):515-9.

344. Tenenbaum A, Fisman EZ, Motro M L-Arginine: rediscovery in progress. *Cardiology* 1998 Dec;90(3):153-9.

345. Koglin, *Ibid.*

346. Yu, *Ibid.*

347. Vazquez, Ibid.

348. Morris CR, Kuypers FA, Larkin S, Vichinsky EP, Styles LA. Patterns of arginine and nitric oxide in patients with sickle cell disease with vaso-occlusive crisis and acute chest syndrome. *J Pediatr Hematol Oncol* 2000 Nov-Dec;22(6):515-20.

349. Maggs DJ, Collins BK, Thorne JG, Nasisse MP. Effects of L-lysine and L-Arginine on in vitro replication of feline herpes virus type-1. *Am J Vet Res* 2000 Dec;61(12):1474-8.

350. Kozniewska Ewa, Roberts Timothy P L, Tsuura Mitsuharu, Mintorovitch Jan, Moseley Michael E, Kucharczyk John. N^G-Nitro-L-Arginine Delays the Development of Brain Injury During Focal Ischemia in Rats. *Stroke*. 1995;26:282-289.

351. Morikawa E, Moskowitz MA, Huang Z, Yoshida T, Irikura K and Dalkara T. L-Arginine infusion promotes nitric oxide-dependent vasodilation, increases regional cerebral blood flow, and reduces infarction volume in the rat. *Stroke*, 1994;Vol 25, 429-435.

352. Cotter G, Kaluski E, Blatt A, Milovanov O, Moshkovitz Y, Zaidenstein R, Salah A, Alon D, Michovitz Y, Metzger M, Vered Z, Golik A. L-NMMA (a nitric oxide synthase inhibitor) is effective in the treatment of cardiogenic shock. *Circulation* 2000 Mar 28;101(12):1358-61.

353. Fried, pp198-215.

354. Fried, p7.

355. Adams MR, McCredie R, Jessup W, Robinson J, Sullivan D, Celermajer DS. Oral L-Arginine improves endothelium-dependent dilatation and reduces monocyte adhesion to endothelial cells in young men with coronary artery disease. *Atherosclerosis* 1997 Mar 21;129(2):261-9.

356. Fried, p6.

-
357. Lerman, Ibid.
358. Cotter, Ibid.
359. Gianotti L, Braga M, Gentilini O, Balzano G, Zerbi A, Di Carlo V. Artificial nutrition after pancreaticoduodenectomy. *Pancreas* 2000 Nov;21(4):344-51.
360. Fried, p7.
361. Balch James F and Balch Phyllis A. Prescription for Natural Healing. 2nd ed.; Garden City Park, NY: Avery Publishing Group, 1997, pp320-24.
362. Murray Michael and Pizzorno Joseph. Encyclopedia of Natural Medicine. Rocklin, CA: Prima Publishing; 1991, pp378-5.
363. Balch, pp320-24.
364. Murray, pp378-5.
365. Balch, p496.
366. Balch, Ibid.
367. Kennedy Ron. Balancing Blood Pressure with a Time-Tested Technique. *Journal of Longevity*. vol 6 No 3 2000 29-31.
368. Walker Morton. and Gordon Garry. The Chelation Answer New York: M. Evans and Company, Inc.; 1982, pp111-136.
369. Holford, p2.