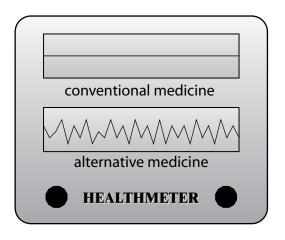
# The



# of Conventional Medicine

Bill Sardi

#### TABLE OF CONTENTS

The Collapse of Conventional Medicine

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#### Author:

Bill Sardi www.askbillsardi.com

#### Book Design:

Sand Dollar Marketing info@sdmllc.com www.sdmllc.com

Lightning strikes 2
No health benefit from hormone replacement 2
Knee operations worthless3
No benefit from breast removal3
Keep pointing fingers at alternative medicine 4
What makes people think conventional medical reatment works?
High technology gives the appearance of credibility 6
Alternative therapies only work because of the placebo effect
Who's a health quack?9
Prostate cancer surgery: Are the patients fully nformed?
Patients playing on both sides of the fence 12
The problem of public demand12
War on cancer has failed13
Medicine, medicine, more and more medicine 14
Why patients on medicines may never get well 15
Antidepressants: safe alternatives abound, but will doctors prescribe?
Kava kops 17
Poison Control Centers, reports of Mortality by substance, 2001

Antibiotic resistance: what will mankind use in place of penicillin?
Some studies of useless value 21
What's the appeal of alternative medicine? 21
The attractiveness of alternative medicine 23
Medical research spending, US, National Institutes of Medicine budget 2001 24
So what works?24
Preventive medicine distorted for commercial gain 24
Which pathway to health?25
Hypertension treated as a drug deficiency 27
Nutritional factors and hypertension 28
Nutritional medicine30
Efforts to confuse the public
Alternative medicine is not escaping review 32
Therapeutic touch
Applied kinesiology
Homeopathy34
Patients see no alternatives
Multivitamins for everyone, but Doctors have a long way to go
Recent books by Bill Sardi49

# THE COLLAPSE OF CONVENTIONAL MEDICINE

Cured yesterday of my disease, I died last nite of my physician. -Matthew Prior, 1664-1721 AD Columbia Book of Quotations 1996

It began with the advent of magic bullet drugs, the first being penicillin. While Alexander Fleming was being given credit in 1922 for his discovery that a mold was observed to kill germs in a laboratory dish when viewed under a microscope, actually Louis Pasteur had made the same microscopic observation six decades earlier with fresh-crushed garlic. But garlic could not be made into a patentable molecule and it, like so many other natural remedies, was soon to be cast into a class of snake oil remedies. Pharmaceutical companies thereafter developed vaccines, hormone replacements such as insulin, synthetic thyroid and estrogen/progesterone, and a host of other patentable molecules that are often just altered versions of molecules found in nature. Surgical technology improved until now more than 70 million surgical procedures are performed annually in the US. Use of prescription drugs has soared past \$100 billion annually. But with all of this largesse, conventional medicine is collapsing, falling to scientific studies that uncover its many unproven therapies.

Modern medicine has claimed the high road, boasting that it is backed by science and all the other fringe health disciplines, such as chiropractic, homeopathy, naturopathy and the like, are nothing more than pseudo-sciences. So, let the buyer beware when entering the door of medical charlatans.

#### Lightning strikes

But then lightning struck. In 1993 the New England Journal of Medicine published its landmark report on the use of alternative medicine by the American population. The report revealed that Americans paid more visits to alternative health practitioners (425 million) than to primary-care physicians (388 million visits). Conventional medicine had lost over half of the market share for primary health services to so-called snake-oil vendors. Americans were visiting alternative doctors for ten top health problems: back pain, anxiety, headache, sprains or strains, insomnia, depression, arthritis, digestive problems, high blood pressure and allergies.

Then, more recently, lightning struck again, and again, and again. Only this time it had nothing to do with the growing popularity of alternative medicine but rather the scientific failings of modern medicine.

# No health benefit from hormone replacement

First, a shocking report was carried by the news media in mid-July of 2002. After decades of telling women who reached menopause (and had not had a hysterectomy) to take hormone replacement therapy, this advice had never been tested. So researchers set out to confirm the hypothesis that estrogen replacement not only remedied hot flashes but was good for the heart and circulatory system. Doctors had been telling women just that for decades. But researchers had to abandon a long-term study prior to its intended finish date

in 2005 when it became apparent that hormone replacement slightly increased the risk for strokes and heart disease. Many doctors did not know what to tell their patients and are reported to have removed their phones from the hook because of the volume of calls from concerned women. <sup>[2]</sup> While estrogen may reduce hot flashes, there was no medical reason to take hormones. Six million women who were actively taking hormone replacement therapy had been misled and millions more who preceded them.

#### Knee operations worthless

In the same month the New England Journal of Medicine was reporting that 300,000 operations performed annually to ease arthritis pain were of worthless value. There was no difference between patients who underwent real knee surgery and a sham or pretend operation. Arthroscopic knee surgery for osteoarthritis costs around \$5000 per case or a total exceeding \$1.5 billion per year. [3]

#### No benefit from breast removal

By October the New England Journal of Medicine was again releasing a shocking study. After 20 years it was found that surgical breast removal (total mastectomy) was not shown to increase survival rates compared to women who underwent breast-conserving surgery (lumpectomy). [4]

Three long and widely practiced medical or surgical technologies were worthless. How had modern medicine come to believe these treatments were worthwhile without scientific evidence?

### Some disproven technologies that conventional medicine currently embraces

- Infant apnea monitors
- Bone marrow transplants (for breast cancer)
- Breast removal surgery (vs. lumpectomy for breast cancer)
- Knee surgery for osteoarthritis
- Hormone replacement therapy

# Keep pointing fingers at alternative medicine

Facing competition in the marketplace, physicians have responded to protect their turf, often calling for more scrutiny of alternative therapies and condemning side effects of certain herbs. This criticism serves as a distraction to the widespread malpractice that is going on in conventional medicine.

While many physicians are calling for the examination of alternative therapies to determine if they are safe and effective, should conventional medicine escape the same review? Ulrich Trohler, professor of the History of Medicine at the University of Freiburg, Germany, says "Before doctors rush to condemn the weak evidence base underpinning these alternative therapies they should pause and consider the record or orthodox medicine." [5]

Are the treatments that physicians offer backed by good scientific studies? Some authorities have claimed that only cataract lens implant surgery, repair of fractured or worn out bones and tooth repair and replacement, are backed by any good science. The rest of what conventional medicine has

to offer is only marginally backed by well-designed scientific studies.

In 1995 British investigators responded to the allegation that only 10-20 percent of treatments physicians provide have any scientific foundation. The researchers examined 109 consecutive patients treated at a clinic and found only 53 percent could be supported by randomized controlled trials and 29 percent by unanimous agreement among physicians. Their conclusion was that "earlier pessimism over the extent to which evidence-based medicine is already practiced is misplaced." The data didn't correlate with their conclusion. Conventional medicine still fared miserably when it came to scientific underpinnings. [6]

# What makes people think conventional medical treatment works?

James E. Alcock, writing in the The Scientific Review of Alternative Medicine, asks: "What makes people think that alternative remedies work?" Alcock says before we ask that question we should ask "What makes people think conventional medicine works?" The answer to both questions is pretty much the same, he says. "We think they work largely because we feel better after taking them, or authorities tell us that we are better. Proponents of alternative therapies are largely winning the public relations war with their hopeful, uplifting messages, whereas proponents of scientific biomedicine have so often assumed that the superiority of their product was self-evident (while underestimating the strength of the 'anti-doctor' backlash in society)." [7]

Estimated number of visits to office-based physicians (conventional medical doctors) in the year 2000

Percent of these visits where 3.8% of all visits alternative medical therapies were ordered:

Source: Advance Data, No. 328, Center Health Statistics, June 5, 2002

Conventional medicine, for all of its air of superiority, prestigious medical schools, myriads of medical journals and billions of dollars of research, turns out to be nothing more than a religion, a belief that what it does is beyond reproach. Who could believe that the pseudoscientists have an MD after their name?

# High technology gives the appearance of credibility

Oh, unquestionably, alternative medicine has its own Ouija boards....... dowsing rods, crystal therapy, iridology, therapeutic touch are some of the unproven therapies offered. Conventional medicine often gives the appearance of being scientifically established because it utilizes high technology.

For example, consider home apnea monitors. No one in conventional medicine has a real grip on the cause of sudden infant death syndrome (SIDS). Based on a paper written in the Journal of Pediatrics, worried parents who may have already lost a child to SIDS were offered sleep apnea monitors after the birth of their next child. The machine would tell parents if their baby stopped breathing. But after years of use, with some 20,000 infants being monitored annually, at an estimated cost of \$20 million per year, the rate of sudden infant death

had not declined. Then in 1992 the American Academy of Pediatrics advised parents to place their sleeping babies on their backs and the rate of sudden infant death declined by 40 percent. [8] A simple and inexpensive remedy had been found for SIDS. Despite this, apnea monitors continue to be used today, without any real health benefits. A recent editorial in the Journal of the American Medical Association suggests a "severe curtailing of home monitoring to prevent SIDS." [9]

It could be said that home monitors remain in use solely to calm parents who may have already lost a baby to SIDS. But a recent study found that apnea monitors only served to "cause significant emotional distress for the parents," if for nothing else than 90 percent of the time the warning system on the monitor is set off accidentally. [10]

# Alternative therapies only work because of the placebo effect

Yet medical doctors keep pointing fingers at the failings of alternative medicine. Patients can be easily fooled, they say. The American Medical Association's Home Medical Encyclopedia for consumers says "Many alternative practitioners are sympathetic listeners who give sensible advice backed by treatments that have, at the very least, a powerful placebo effect." Hmm, the placebo effect, the idea that if a person believes in something it's more likely to work. But even this hallowed belief is now coming into question.

For decades physicians have argued that the alleged benefits perceived by their patients who undergo alternative medical therapy can all be ascribed to the placebo effect. (Somehow this argument never works the other way around, that the benefits of modern medical treatment are just imagined.) Recently researchers in Germany examined the placebo effect which modern medicine has believed in since Henry K. Beecher first proposed the idea in a report published in the Journal of the American Medical Association. [11] What Dr. Beecher claimed was that among patients who took a pill with no active ingredients in it, about 35 percent of those patients would experience improvement in their condition. Beecher assumed the power of suggestion was responsible for any measured benefits

For decades since Dr. Beecher's paper was published doctors would simply attribute their patient's claims that some vitamin or herb worked to the placebo effect. But recently German researchers reviewed Dr. Beecher's paper and found his paper was seriously flawed. [12] In some of the studies he cited in his paper in 1955 no placebos were used at all. In other studies the patients' condition improved as a normal course of their illness and was not attributed in any way to placebo. The German researchers examined another 800 papers on the placebo effect published since Dr. Beecher's report. They found no evidence whatsoever for the placebo effect. In studies where there were three groups, one group that received a medicine, the other group a placebo and a third group no treatment, the placebo group and the "no treatment" groups always matched. The German researchers concluded that "literature relating to the magnitude and frequency of the placebo effect is unfounded and grossly overrated, if not entirely false." They indicate the placebo effect is "largely, or indeed totally, illusory." [13]

The point is, modern medicine accepted Dr. Beecher's work without question for over four decades, as it did the removal of tonsils, or the use of apnea monitors. The placebo effect is so ingrained into modern medicine it is difficult to confront any physician with the modern evidence of its nonexistence. Even though the prestigious New England Journal of Medicine reported that the placebo effect was nothing more than a myth and the New York Times wrote an article explaining how modern medicine bought into the idea of a placebo effect, few physicians have abandoned the idea that placebos actually work. [14]

Will physicians rapidly abandon disproven practices and cancel surgery and call their patients to take them off of unproven medicines? It took awhile for surgeons to stop taking out tonsils when that operation was found to be of no value.

#### Who's a health quack?

There is a bigger issue here. What about medical quackery? Quackery refers to treatments that are without value, offered by people who make claims that are untrue, says a report in the American Cancer Society's journal CA-A Cancer Journal for Clinicians. Standard or conventional treatment refers to mainstream medical treatments that have been tested following a strict set of guidelines and found to be safe and effective. Longtime watchdog over alternative medicine, Stephen Barrett, MD, says "quackery is derived from the word quacksalver (someone who boasts about his salves). Dictionaries define quack as 'a pretender to medical skill; a charlatan' and 'one who talks pretentiously without sound knowledge of the subject discussed.' These definitions suggest

that the promotion of quackery involves deliberate deception, but many promoters sincerely believe in what they are doing. The FDA defines health fraud as 'the promotion, for profit, of a medical remedy known to be false or unproven.' This also can cause confusion because in ordinary usage — and in the courts — the word 'fraud' connotes deliberate deception."

So, are our beloved Harvard-trained doctors, the ones who prescribed estrogen, performed knee surgery, unnecessarily removed our tonsils when we were kids, who warned women to have their breasts surgically removed at the first sign of breast cancer, do they fit the definition of a quack?

Unproven or disproven therapies continue to be practiced, but State Medical Boards take no action. The Federal Trade Commission and the Food & Drug Administration are armed to fight health quackery in regards to drugs and medical devices. Yet they only swat the small-fry companies out of business while the major pharmaceutical companies prevail.

# Prostate cancer surgery: Are the patients fully informed?

It's not likely that patients will be fully informed of the drawbacks of modern medicine. Take for example prostate cancer surgery. In the largest study conducted so far, the Agency for Healthcare Policy Research showed that men who had their prostate glands surgically removed lived about 14 years after surgery. Urological surgeons hailed this as evidence of the effectiveness of surgery. But after a long-term study was conducted it was found that men who did nothing, what's called "watchful waiting," also lived on average about

14 years following diagnosis of prostate cancer. There was no benefit to the surgery.

So are males informed of this study prior to prostate removal surgery? Surgical consent forms and patient information literature couch their words Patient information distributed by New York-Presbyterian Hospital says "surgical removal or 'watchful waiting'....both have their advantages and disadvantages." An information sheet produced by familydoctor.org says watchful waiting "may be the best choice." But few if any patient education sheets or consent forms actually come out and reveal that for most men surgical removal of the prostate has not been shown to improve survivability over watchful waiting. Are the patients being intentionally misled? Most urologists say they let the patient make their own decision. Wait a minute. So if a patient demands care, even though it is unproven, isn't the physician still in jeopardy of losing his medical license for essentially performing unproven treatment? Does patient demand get the doctor off the hook?

Oh, yes, a more recent study published in the New England Journal of Medicine was more favorable towards surgery over watchful waiting. But over the six-year period of investigation, while mortality rates from prostate cancer were cut in half among men undergoing surgery, there was no difference in overall survivability from all causes. [15]

# Patients playing on both sides of the fence

In 1993 when the report was issued on the popularity of alternative medicine, it was also reported that most patients were hedging their bets and going to both conventional and alternative practitioners. About 8 of 10 users of alternative therapies also sought treatment for their condition from a medical doctor. The services of medical doctors are better reimbursed by health insurance and they have all of the modern diagnostic tools, ultrasound, x-rays, CAT-scans, MRIs and an array of blood tests. **Medical doctors may be in the best position to provide a proper diagnosis.** 

It's real obvious that patients are part of the problem. Desperate for cures, and over-trusting of physicians, they may not want to hear that a particular treatment has been disproven. It's difficult to convince a mother who has a screaming baby in her hands due to a middle-ear infection that the use of antibiotics is not proven and that the overuse of antibiotics will likely induce germ-resistant bacteria. Patients want treatment and they often feel that the insurance companies have all the money they paid into health plans over the years and they want some of it back in the form of treatment.

#### The problem of public demand

The problem gets stickier when a life-threatening disease is involved. Take bone marrow transplants for example. In a landmark report published in the New York Times in 1999 entitled "Health business thrives on unproven treatment, leaving science behind," it was revealed that physicians continued to

perform bone marrow transplants on breast cancer patients beginning in the 1980s with only theoretical benefits. Called a "technology based on a hypothesis," otherwise hopeless breast cancer patients, who had unsuccessfully undergone other treatments, confronted their insurance companies to demand treatment regardless of the lack of any evidence the treatment worked. It took till 1999 for the results of large clinical trials to be completed. In four of five studies there was no difference in survival between women who had transplants and those who underwent conventional therapy. One transplant surgeon said: "We deceived ourselves and we deceived our patients. We oversold it." [16] But still there were no charges of medical quackery. Were these just misguided physicians?

#### War on cancer has failed

By the way, the war on cancer is another failure of modern medicine. Since the war on cancer was initiated by President Richard Nixon in the 1970s over \$30 billion has been spent on research. The age-adjusted mortality rates due to cancer were 189.6 per 100,000 people in 1970 and rose to 200.9 per 100,000 by 1994. The research community has often misled Americans that the war is being won against cancer, displaying longer survival rates following diagnosis. But these advances are attributed to earlier detection rather than effective treatment. **Modern treatments for cancer have been called** "disappointing." [17] Cancer therapy is very toxic. It's sad to say that most cancer patients succumb to the side effects of treatment rather than their disease.

# Medicine, medicine, more and more medicine

#### Comparative annual expenditures for health care

Prescription drug sales	\$175 billion
Drug-related side effects	\$177 billion
Cancer treatment	\$104 billion
Alzheimer's disease	\$100 billion
Diabetes	\$ 92 billion

Americans have a voracious appetite for prescription drugs, and doctors are writing prescriptions at a record clip. Americans use over \$100 billion of prescription drugs annually which generates an estimated \$177 billion of side effects. [18] Properly-prescribed prescription drugs, dispensed in a hospital by a nurse, now kill 274 patients a day, or over 100,000 patients a year. But patients keep coming back for more.

Hidden from view is the fact that the biological action of most prescription drugs can be duplicated with nutritional supplements, vitamins, minerals and herbs, without all the cost and side effects. For example, coenzyme Q10 could replace digitalis (patients on digitalis must be tested for toxicity frequently). Ginger, fish oil and SAMe are potent non-steroidal anti-inflammatory drugs that do not cause the sometimes mortal bleeding gastric ulcers as does ibuprofen (Aleve, Motrin, others) or aspirin. Fresh-crushed garlic, magnesium, fish oil and vitamin E thin the blood without the threat of hemorrhaging with Warfarin (coumadin). Magnesium, as a natural calcium blocker, could replace nearly \$3 billion of calcium-blocking drugs sold annually.

# Why patients on medicines may never get well

Physicians are so poorly trained in nutrition they see only with blinders. The herbs and vitamin pills are nothing more than snake oil, period. Medical doctors can cite all the side effects of herbs, but appear to be unaware of the side effects of prescription medications. Furthermore, many prescription drugs deplete the body of essential nutrients making it virtually impossible for the patient to ever get well. Statin cholesterol drugs deplete the body of coenzyme Q10. Acetaminophen (Tylenol) depletes the body of glutathione which results in over 70,000 cases of liver toxicity annually and hundreds of deaths and liver transplants. Cortisone robs the body of four minerals and three vitamins. Ibuprofen reduces folic acid levels. Antidepressants like Elavil deplete vitamin B6 and coenzyme Q10. [19]

# Antidepressants: safe alternatives abound, but will doctors prescribe?

If there was ever a class of drugs that should be scrutinized for effectiveness, particularly compared to natural remedies, it is the antidepressants. A 1999 *Reuters Health* report revealed that two of three patients on antidepressant drugs are satisfied with their treatment. The survey, conducted by the National Depressive and Manic-Depressive Association, showed that depression continued to impair social life or work performance in better than 7 in 10 patients taking antidepressants. [20]

The antidepressants known as selective serotonin reuptake inhibitors (Prozac, Zoloft, Paxil, Celexa, Luvox) are only 60

to 80 percent effective and would probably seldom be used if consumers knew that 40-50 percent of the users of these drugs report inability to have an orgasm as well as sleep disruption, headache, sweating and tremor. Furthermore, users should not drink a glass or wine or beer while taking them. Few patients are told this. [21]

Consider a natural alternative. In 1994 German physicians prescribed nearly 66 million daily doses of St. John's wort for mild cases of anxiety or depression. [22] What do they know about this herb that American physicians do not? In 1996 the British Medical Journal reported that St. John's wort worked better than placebo. [23]

Pfizer, maker of Zoloft, a competing prescription antidepressant, recently sponsored a study of St. John's wort. A massive public relations campaign was employed to convince consumers that St. John's wort is ineffective for mild depression. Some news outlets did not identify Pfizer as the sponsor of the study. Oddly, Pfizer did not conduct any publicity campaign against St. John's wort in Germany where physicians use it as first-line therapy for depression. Consumers were being asked to abandon St. John's wort and erase from their minds the previous 23 positive studies with this herb. The Pfizer study purposefully selected patients who had suffered from major depression for more than 10 years.

St. John's wort is a drug in Germany and its potency is strictly regulated by the government whereas in the US the amount of the active ingredient in this herb may vary in over-the-counter products. St. John's wort has produced

comparable or superior results to prescription antidepressants in study after study. [24] The unsupervised use of St. John's wort, as tabulated in a telephone survey, found 84 percent of users reported improvement and 12 percent discontinued the herb due to minor side effects. [25] Nothing is absolutely safe and St. John's wort may produce side effects. Patients should be advised of photosensitivity, possible cataracts upon chronic sun exposure, and interference with birth control pills or anti-AIDS drugs. [26] Yet St. John's wort is far less troublesome than prescription antidepressants.

Researchers at none other than Harvard Medical School just recently announced that SAMe (S-adenosyl L-methionine) in doses ranging from 200-1600 milligrams per day are superior to placebo in reducing symptoms of depression and are as effective as many antidepressant drugs. [27] How many physicians will cease prescribing Prozac or Elavil in favor of SAMe? Probably not many since patients don't have to return to the doctor's office to renew their prescription, it's an overthe-counter product.

#### Kava kops

Even more alarming is the Food & Drug Administration's effort to scare patients away from Kava kava, another herbal antidepressant. Based upon a few reported cases of liver toxicity in Europe among patients who were also taking drugs that were potentially troublesome to the liver, European countries withdrew Kava kava from the marketplace. The US FDA could not find enough adverse reports to prompt a US recall so they issued a bulletin scaring consumers away from the product. [28]

All the while, US physicians are prescribing the pain reliever acetaminophen (Tylenol) which depletes the liver of glutathione, a major antioxidant, which results in liver disease. More than 70,000 cases of liver toxicity are reported in hospital emergency rooms annually with 70-100 reported deaths and causes 35 percent of the cases of liver failure which may require liver transplantation. But the "Kava kops" are chasing down any potential cases of liver toxicity from Kava kava, not acetaminophen. Stanford-based physicians suggested adding glutathione to acetaminophen products to prevent liver toxicity, but so far the FDA has ignored the request. [29] US physicians continue to prescribe acetaminophen without alarm but warn their patients away from Kava kava. Meanwhile, researchers in Germany report that Kava kava worked better than benzodiazepine tranquilizers (like Valium) in reducing tension and anxiety. [30]

#### Poison Control Centers, reports of Mortality by substance, 2001

Modern pharmaceuticals	Deaths	Alternative medicines	Deaths
Analgesics	531	Multiple vitamins	0
(acetaminophen, aspirin, others) Anticholinergics	8	Minerals (mostly potassium)	7*
Anticoagulants (blood thinners)	4		0
Anticonvulsants	59	Ginkgo biloba	0
Antidepressants	255	Echinacea	0
Antihistamines	44	St. John's wort	0
Antimicrobials (antibiotics)	13	Ginseng	0
Asthma therapies	19	Kava kava	1*
Anti-cancer drugs	2	Ma huang (ephedra)	3*
Cardiovascular drugs	153	Homeopathic	0
Cough & cold remedies	14	Amino Acids	0
Diuretics (water pills)	10	Blue-green algae	0
Gastrointestinal drugs	10	Glucosamine	0
Hormones	36		
Muscle relaxants	42		
Sedatives	266		
Totals	2068	Totals	11

Source: American Journal Emergency Medicine 20: 391-452, 2002

# Antibiotic resistance: what will mankind use in place of penicillin?

Modern medicine's over-reliance upon prescription drugs is further illustrated by the problem of antibiotic resistance. The overuse of germ killing drugs such as Streptomycin, tetracycline

<sup>\*</sup> Deaths largely attributed to misuse of these substances

and penicillin has reached a point where some disease-causing organisms are resistant to all approved antibiotics. An estimated 40,000 people now die in hospitals annually due to drug-resistant infections. Yet natural antibiotic molecules found in garlic (allicin), olive leaf extract (oleuropein) and oil of oregano (carvacrol) do not induce antibiotic resistance and are effective against a wide array of bacteria, viruses, fungi-yeast, amoeba and protozoa. [31]

The over-reliance upon prescription antibiotics is displayed in the problem of colon cancer. Recently researchers found that Helicobacter pylori, a bacterium that infects up to 50 percent of the US adult population, is responsible for colon cancer. [32] If physicians screen their patients for H pylori infection and treat all of them with antibiotics they may induce antibiotic resistant forms of this bacterium. So antibiotic treatment is not prescribed unless gastric ulcers occur, another disease caused by this bacterium. But humanity could eradicate colon cancer if modern medicine would utilize natural antibiotic compounds such as those found in garlic, olive leaf or oil of oregano. [33]

Modern medicine has become so beholding to the pharmaceutical companies it will let patients die before searching for alternative therapies. Despite the widely publicized problem of antibiotic resistance, the National Institutes of Health has yet to sponsor a human clinical study using any natural antibiotics. That mankind is faced with the recurrence of widespread plagues has not phased physicians. Natural antibiotics are still unproven and remain in the category of snake oil. Yet how will these herbal antibiotics ever rise out of low status when the National Institutes of Health holds most of the research dollars and fails to conduct studies?

	ANTIBIOTIC INTRODUCED	FIRST RESISTANCE
Penicillin	1929	1940
Streptomycin	1944	1947
Vancomycin	1956	1987
Allicin (garlic)	1858	Never Observed

#### Some studies of useless value

So much of modern medicine is misdirected. Consider the foibles of the National Eye Institute. It took NEI over 10 years to study a vitamin formulation for macular degeneration. The NEI researchers were able to claim that the vitamin and mineral formula slightly slowed down the progression of the eye disease after many years of use. [34] The problem is that most of the patients who have macular degeneration are old and may be in the grave before they experience any benefit from taking vitamins. The NEI, like many research institutions, prolongs studies to maintain jobs. Meanwhile, private industry has taken the ball into their own court and conducted a landmark study, which is due to be published shortly that reveals an extract from marigold flower petals reverses some of the parameters of the disease in just a few months use. [35]

# What's the appeal of alternative medicine?

So why is it that more and more people, at least 7 in 10 Americans, are electing to go to alternative practitioners over Harvard-trained medical doctors? What makes alternative medicine alternative? The appeal of alternative medicine appears to be the perception that it is non-invasive. **A survey** 

was recently conducted and found that patients believed alternative treatments were more appealing because they are less invasive, less drug-like. [36]

MAN-MADE ANTIBIOTICS	NATURAL ANTIBIOTICS
Progressive germ resistance	No germ resistance observed
No. annual prescriptions: 100 million (half are unnecessary)	Annual use: unknown, non-Rx
Cost to treat drug-resistant infections: \$5- \$30 billion annually	
• Penicillins*	• Allicin (garlic)
<ul><li>Cephalosporins*</li></ul>	<ul> <li>Carvacrol (oil of oregano)</li> </ul>
<ul><li>Macrolides (Zithromax, Erythromycin)*</li></ul>	Oleuropein (olive leaf)
• Quinolones (Ciprofloxacin, Levaquin)*	
• Aminoglycosides (Gentamycin, Neomycin)*	
• Glycopeptides (Vancomycin)*	
• Tetracyclines (Doxycycline)*	

<sup>\*</sup> Induce germ-resistance

It cannot be said that patients only go to alternative practitioners out of ignorance. Alternative medicine is appealing to the educated, not the uneducated. According to recent surveys, persons with a high school education or better are more likely to embrace alternative therapies. [37]

# The attractiveness of alternative medicine

With all of the negative publicity surrounding conventional medicine, one wonders why patients remain so loyal to their doctors. American Demographics magazine reports that the number one reason why patients shy away from alternative medicine is the possibility of side effects. About 65 percent of adults polled said they are wary of adverse effects from alternative therapies and 51 percent said they are deterred by a lack of scientific proof. But nearly a third of adults polled said they would consider alternative medicine even if an illness was easily treated with traditional medication. Of interest, if diagnosed with a complex, potentially fatal illness, the percentage of Americans who say they would likely inquire about alternative medicine nearly doubles to 60 percent. According to American Demographics, alternative medicine is a "girl thing," with vastly more women than men partaking of aromatherapy (12% vs. 2%), prayer (51% vs. 36%), and megavitamin therapy (32% vs. 19%). [38]

Are medical doctors interested in alternative medicine? A survey of US physicians finds they believe alternative medicine is moderately useful, but want more scientific proof.

[39] Roy Porter, who has written Medicine: A History Of Healing (Marlow & Co, New York 1997) says it is interesting to observe that doctors have tended to be most enthusiastic about employing alternative therapies when a monopoly of practice has been granted to them in the field concerned, as in the practice of acupuncture in France and certain state in the US."

Can alternative medicine deliver scientifically proven therapies? It's not likely.

The National Center for Complementary and Alternative Medicine's annual budget is now almost \$100 million. The budget for the National Institutes of Health is just over \$20 billion annually. So alternative therapies represent just one half of one percent of NIH's research. For comparison, a pharmaceutical company may spend hundreds of millions of dollars bring just one new drug to market.

# Medical research spending, US, National Institutes of Medicine budget 2001

Conventional medicine	\$20,000,000,000 (99.5%)
Alternative medicine	\$ 100,000,000 (00.5%)

#### So what works?

If conventional medicine often doesn't have the scientific evidence to support its treatments and alternative medicine is a grab-bag of mixed therapies, not all which are expected to be proven by science, then what discipline in medicine should the public ascribe to?

# Preventive medicine distorted for commercial gain

Certainly preventive medicine would be desirable, but this is another concept in public health that has been distorted by modern medicine. To physicians, preventive medicine means scouting for more disease so more treatment can

be provided. Health screenings for cholesterol, cataracts, glaucoma, blood pressure and blood sugar are designed to increase sales, not prevent disease. True preventive medicine would avert the occurrence of disease. This goal is paramount since developed countries of the world simply cannot treat all the undiagnosed disease that currently exists. If all the undetected cases of glaucoma, hypertension and diabetes were diagnosed it would bankrupt Medicare and every health insurance plan. The only way to avert a future financial disaster and a meltdown of the health care system would be to reduce the incidence of disease. But will doctors go along with the idea?

#### Which pathway to health?

So back to our question, which approach should health care consumers pursue? If conventional western medicine is overcome by commercialism and alternative medicine is so unreliable, where do people turn? Do they turn to traditional Chinese medicine? Do they embrace Ayurveda, east Indian herbal medicine? No, we ought to learn why people in various lands live so long and live so healthy rather than study disease.

Health and longevity have only come to Japan in recent decades. The Japanese now live the most disease-free years of life and they have the highest per capita consumption of fish. <sup>[40]</sup> The Greeks are extolled for their healthy living centered around omega-3 fish oils. <sup>[41]</sup> The Eskimos are virtually free of many chronic diseases which is, once again, ascribed to their consumption of fish. <sup>[42]</sup>

Are you getting the picture? **Increased consumption of just one nutritional factor, omega-3 fatty acids from fish or flaxseed oil, would likely improve health parameters around the globe.** But the discovery that the Eskimos were living healthy due to fish fat dates back to the 1970s. These oils were found to be essential for life in the 1930s. A report recently published in the journal World Review of Nutrition and Diet is entitled: "From Eskimos to clinical cardiology – what took us so long?" [43]

Omega-3 oils are also associated with lower rates of asthma, Alzheimer's disease, multiple sclerosis, sudden-death heart attack, Parkinson's disease, inflammatory bowel disease, diabetes, high blood pressure and blood vessel disease. [44] Yet the National Institutes of Health has yet to establish a recommended daily allowance for this essential nutrient. More than 4500 studies now confirm the health benefits of omega-3 oils, a nutrient that is deficient in 8 of 10 North Americans. Again, will doctors change their prescribing habits and begin to write scripts for fish or flaxseed oil? The Food & Drug administration still resists efforts to include health claims on the labels of fish oil bottles.

Diet and nutrition play majors roles in reducing the incidence of disease. Western populations, which do not regularly eat fish, and where sodium, refined sugars and saturated fats and calcium from dairy products are over-supplied, suffer from many chronic diseases not experienced by primitive societies that have little or no budget for health care and certainly no funds for health insurance. Obesity, which is increasing in western societies, is not prevalent in areas of the world where people do not eat a lot of dairy products (the fattest people

in the US reside in Wisconsin, the dairy state) and where domesticated animals are not fattened with grain just prior to their slaughter.

#### Hypertension treated as a drug deficiency

Conventional medicine sees diseases through the eyes of what can be treated, what can be prescribed. **Take high blood pressure for example. One would think that this disease is a drug deficiency.** Even though there is overwhelming evidence that hypertension can be remedied by diet and nutritional supplements, physicians keep prescribing diuretics (water pills), calcium blockers and ACE inhibitors, \$33 billion worth of these drugs annually. [45] But a recent survey found that nearly one in four patients may stop taking their medications because of side effects and one in three patients falsely believe their hypertension is under control with medication when it is not. [46]

Some time ago a scientific consensus group promoted beta blocker drugs as first-line therapy for high blood pressure in the elderly, but Dr. Franz H. Messerli says "since then it has become clear that, in the elderly, beta blockers are inappropriate and should no longer be used an initial antihypertensive therapy. This means that in the United States alone more than 7 million elderly patients with high blood pressure are exposed to the cost, inconvenience and adverse effects of beta blockers without having any benefits whatsoever." [47]

Despite this knowledge, conventional medicine trudged forward recently conducted a study to compare beta blockers against three other classes of drugs. The study had to be abandoned because the patients taking beta blockers had 25 percent more cardiovascular events (strokes, heart attacks) and were twice as likely to be hospitalized for congestive heart failure as those patients taking another drug. [48] Modern medicine has difficulty abandoning unproven and even potentially mortal therapies.

Hypertension has become the leading reason for visits to physicians as well as for drug prescriptions. Most hypertensive patients have marginally high blood pressure. A report published in the American Journal of Cardiology states that "few patients with uncomplicated marginal hypertension require drug treatment.... There is little evidence these patients (with marginal hypertension) will achieve enough benefit to justify the costs and adverse effects of antihypertensive drug treatment." [49]

But perplexingly a 1998 report chided doctors for not treating hypertension aggressively. The report said that "physicians frequently fail to increase the dose of antihypertensive medications." [50] This is despite the fact that the use of antihypertensive medications can be fatal.

#### Nutritional factors and hypertension

A recent report indicates nutritional factors such as sodium, potassium, magnesium, and essential fatty acids are paramount in the treatment of high blood pressure. [51] The consumption of 4000 milligrams of sodium per day by the average American results in 50 million cases of hypertension. Sodium holds excess water in the circulatory system and blood pressure rises. Compare this to Japan where the per capita consumption of

salt is less than 1500 milligrams per day and the incidence of hypertension is much lower.

There are many natural therapies for hypertension.

- A recent study showed that the addition of olive oil to the diet combined with a slight reduction in saturated fat intake reduced the dosage of antihypertensive drugs by 48 percent. [52]
- Just the addition of supplemental potassium to the diet can markedly reduce the need for blood pressure medications. [53] A 1999 study showed that two bananas a day, a rich source of potassium, can control blood pressure as well as ACE-inhibitor drugs without the cost and side effects. [54] Two bananas could lower blood pressure by 10 percent, or about 14-16 points for most patients with mild hypertension. It has been estimated that a reduction of 2 points on the blood pressure scale could reduce strokes by 14 percent and coronary heart disease by 8 percent. [55]
- A 1993 study showed that 3000 milligrams of fish oil significantly reduces blood pressure. [56]
- Low vitamin C stores in the body are associated with high blood pressure. [57] In 1999 a small study showed that 500 milligrams of supplemental vitamin C significantly reduced blood pressure, about three times better than patients who received a placebo. [58]

The problem is, medical doctors don't see themselves to the Mayo Clinic or Harvard to learn how to prescribe lowsalt diets, bananas, vitamin C, olive and fish oil. Furthermore, prescription drugs bring patients back to the office to renew prescriptions whereas over-the-counter remedies at health food reduce dependency upon doctors.

Believe it or not, doctors themselves are attributed to raising blood pressure among their patients. Patient anxieties apparently run high in the presence of doctors. There is a condition known as "white coat hypertension," where the patient's blood pressure is higher when a doctor takes the patient's blood pressure compared to a nurse. Nearly 1 in 5 patients taking ineffective blood pressure medications may have this form of hypertension. When blood pressure is monitored on a 24-hour basis using a device that takes readings every few minutes, more than 25 percent of the patients with resistant hypertension were found to have normal blood pressure. [59]

#### Nutritional medicine

It is unfortunate that nutritional medicine is thrown into the category of perceived marginal therapies offered by alternative medical practitioners. It was nutrition and hygiene that rid the modern world of dysentery, cholera, scurvy, beri beri, pellagra and rickets. And there is sufficient evidence that nutritional supplements could substitute for many prescription drugs and prevent many maladies such as cataracts, macular degeneration, mental depression, hypertension, osteoarthritis, diabetes and heart disease.

#### Partial list of conventional medical treatments that could be partially or totally replaced by nutritional medicine

- Anti-hypertensive medications
- Anti-depressants
- Anti-diabetic medications
- Drugs for osteoporosis
- Cholesterol reduction medications
- Anti-blood clotting medications
- Antibiotics (induce drug-resistant bacteria)
- Heartburn medications
- Gall bladder removal surgery (cholestectomy)
- Kidney stone treatment (ultrasound or surgery)
- Cataracts
- Glaucoma
- Alzheimer's disease
- · Coronary artery blockage

Consider that cholesterol reduction may add six months to a person's life. But just 300 milligrams of vitamin C has been found to increase the human life span by six years! [60]

#### Efforts to confuse the public

THE COLLAPSE OF CONVENTIONAL MEDICINE

There is an ongoing effort to confuse the public over the health benefits of nutritional supplements. For example, bogus attempts have continually been made to scare the public away from supplemental vitamin C. Worldwide attention was given to a report that more than 200 milligrams of vitamin C might increase the occurrence of genetic mutations and cancer. [61] But the science behind this recommendation was conducted in a test tube where conditions could be manipulated to produce a result. The report in Science magazine, the most highly regarded scientific journal, failed to mention that five other studies had recently been conducted on live humans using up to 10,000 milligrams of vitamin C and none of the studies found mega-dose vitamin C produced genetic mutations. Only the bogus test-tube studies received worldwide headlines. The author of the bogus vitamin C study worked for a university-based cancer research center funded by pharmaceutical companies. [62]

Another attempt is to keep nutritional supplements from being affordable so the public cannot use them as alternatives to costly prescription drugs. This is just what is occurring in Britain where authorities are attempting to limit the amount of vitamin B6 to 10 milligrams per pill. [63] It so happens that mega-dose vitamin B6, taken in doses around 300-400 milligrams, would remedy a common form of high blood pressure caused by aldehydes resulting from high blood sugar levels. [64] It would be easy and inexpensive to produce 300-400 milligram vitamin B6 tablets. Instead, by limiting vitamin B6 to 10 milligrams per pill a person with hypertension would have to take 30-40 pills, which would not only be tedious, but would raise the cost to what anti-hypertensive drugs cost.

# Alternative medicine is not escaping review

Science is now purging marginal and poorly substantiated treatments simultaneously from alternative and conventional medicine. What will be left of either discipline will only be a remnant of its former appearance.

Certainly some alternative therapies have been proven to work. When acupuncture is applied to animals it appears to produce pain relief and animals are not subject to the placebo effect. But acupuncture needles are mildly invasive and the use of unsterile needles could produce an infection. So oversight is needed.

#### Therapeutic touch

Yet alternative medicine is going through a purge of its own unproven therapies. For instance, take therapeutic touch. Practitioners of therapeutic touch allege they can manipulate a "human energy field." But when confronted with a test where they had to detect an unseen hand which hovered over their right or left hand they could not do any better than random chance in detecting an energy field. [65] The lack of any health benefits to therapeutic touch was again reported when it was found this therapy was no better than an inactive placebo in reducing pain scores among patients with carpal tunnel. [66]

#### Applied kinesiology

Another questionable alternative therapy is applied kinesiology. This is a pseudo-scientific system of which utilizes muscle testing often used to determine if a food or food supplement is good or bad. Some practitioners ask patients to hold a substance in their hand while their arm is rigidly outstretched. If the practitioner can pull down the arm easily this sign of weakness which indicates the substance being held in the hand is "weakening," not "strengthening." The trick here is that the practitioner may slightly alter the testing procedure. If the arm is slightly lifted upward before pulling

down on the arm to test for strength this relaxes muscles and makes it virtually impossible to hold a rigid position. The remedy being tested will be classified as "weakening."

In Germany, where alternative therapies are more accepted, practitioners of applied kinesiology were asked to test whether a bottle of inactive placebo pills or wasp venom was appropriate for allergic patients. Researchers could not find applied kinesiology was any more useful than random guessing. [67] Again in Germany, researchers recently found that applied kinesiology is not effective in diagnosing nutritional intolerance in children. [68] These negative tests were published in alternative medicine journals.

#### Homeopathy

Homeopathy, a practice begun over two centuries ago, uses micro-doses of potential toxins to provoke defense and self-regulatory responses. The remedies are so diluted they are said to only contain the "molecular shadow" of the active ingredient. The few published studies on the scientific validity of homeopathy are often found to be flawed. [69] A review of 120 published papers on homeopathic treatment failed to find these therapies could be replicated by others. [70] One recent study appears to show that a homeopathic remedy quickened the healing of middle ear infection, but this malady has a high rate of spontaneous resolution that the soundness of the study is questioned. [71]

#### ALTERNATIVES TO PRESCRIPTION DRUGS

The 20 most frequently prescribed drugs at doctor office visits in the U.S. in the year 2000 with nutritional supplements that could replace them.

PRESCRIPTION	NATURAL ALTERNATIVE
1. Claritin antihistamine	Quercetin + vitamin C
2. Lipitor anti-cholesterol	Niacin, tocotrienols, guggulipid
3. Synthroid- thyroid hormone	Selenium (some cases)
4. Premarin	Black cohosh, red clover
5. Amoxycillin antibiotic	Oil of oregano,allicin (garlic), olive leaf
6. Tylenol pain reliever	Fish oil, ginger
7. Lasix diuretic	Potassium, Lipoic acid, Vit.B6, Vit.C
8. Celebrex anti-inflammatory	Fish oil, ginger
9. Glucophage diabetic control	Vitamin C, lipoic acid
10. Albuterol asthma med	Magnesium, fish oil
11. Vioxx pain reliever	Fish oil, ginger
12. Prilosec heartburn	Quercetin + vitamin C
13. Norvasc calcium blocker	Magnesium
14. Atenolol beta blocker	Vitamin C, Vitamin B6, potassium, lipoic acid
15. Influenza virus vaccine	Vitamin C, Vitamin E, selenium, zinc
16. Prednisone steroid	Fish oil
17. Amoxil antibiotic	Oil of oregano, allicin (garlic), olive leaf
18. Prevacid heartburn	Quercetin + vitamin C
19. Zocor anti-cholesterol	Niacin, tocotrienols, guggulipid
20. Zoloft anti-depressant	Folic acid, SAMe, St. Johns wort
Source: Advance Data No. 328 June 5	2002 C

Source: Advance Data No. 328, June 5, 2002, Center Health Statistics.

#### Patients see no alternatives

This writer shudders to even mention that any alternative therapies have been disproven. Alternative treatments are "pet" therapies to many, and a living for others who deliver them. Belief in them is held as close as religion. But just as perplexing are the patients who continue to frequent the hallways of modern medicine without trepidation. It's a wonder that conventional medicine, beyond fixing broken bones, repairing teeth and replacing cloudy cataracts with clear lens implants, has any customers left to serve. Iatrogenic illness, that is "medical doctor induced" morbidity or mortality, is now a grim problem. Doctor induced death is estimated at 230,000 to 284,000 cases per year, which would make this the third leading cause of death in the US. [72] The homeopaths, chiropractors and acupuncturists contribute little to these numbers.

At least homeopathy is harmless. The pocketbook is all that is damaged, though a visit to a homeopathic doctor could delay proven treatment elsewhere. Often people don't want to hear a particular therapy doesn't work, particularly a treatment they chose. More so, they may be loyal to their doctor to a fault. Life on planet earth is defined as "self-healing organisms." The body often gets well on its own. Health practitioners, regardless of their training, will take credit for the cure and collect the bill.

It is doubtful patients are going to stop going to chiropractors who practice applied kinesiology or any other marginal therapies. Likewise, it is unlikely that patients are going to stop getting talked into worthless surgery or cease taking problematic prescription drugs. People want to be treated, they want to pop pills, they want all that high technology, and they want all the herbs, vitamins and alternative therapies too. Confused over which discipline to embrace, conventional or alternative medicine, healthcare consumers elect to cover all the bases, to leave nothing out.

The public may not be aware that nutritional medicine is the overlooked health care discipline that is most likely to deliver long life and good health at a very affordable cost. The greatest advances in the average human life span, from an average of 40 years to over 75 years, occurred during a time when tap water was cleansed by chlorine and when foods were fortified with missing vitamins and minerals. Modern medicine played a lesser role in this achievement. Nutritional medicine is backed by the best science and a long history of safety and success.

One of the problems for nutritional medicine is that it is often cast into a category of marginal therapies offered by alternative medicine practitioners. Sometimes homeopathy cannot be differentiated by the public from nutritional medicine.

While more and more conventional doctors are recommending food supplements for their patients, and some even sell them in their offices, the embarrassing fact is that the patients are oftentimes more knowledgeable about vitamins and minerals than their physicians. The American Medical Association has finally done an about face and recommended multivitamins for everybody. [73] Yet most physicians can't accurately inform their patients of the proper doses of nutrients for optimal health,

nor how to balance calcium and magnesium, copper and zinc, sodium or potassium.

Dr. Bruce Ames, of the University of California at Berkeley, reveals that a deficiency of any nutrients, B vitamins like folic acid, vitamin B6, vitamin B12 or niacin, or minerals like iron or zinc, or shortages of vitamins C or E, mimics the same damage to DNA in living cells as observed from exposure to harmful doses of radiation. The majority of the American population does not consume the recommended five servings of fresh fruits and vegetables daily. Anywhere from 2 to 50 percent of the American public exhibits deficiencies of these nutrients which could result in breaks in chromosomes within the center of cells. Dr. Ames says that remedying nutrient deficiencies "should lead to a major improvement in public health and an icnrease in longevity at low cost." [74] Dr. Ames suggests that food fortification and multivitamin and mineral supplements "might prevent cancer and other chronic diseases." [75]

Change in health and medical care is not going to be physician-driven, it is going to be patient driven. The public simply needs good information that is sorted out so they can understand the real events unfolding in the American health care marketplace. With millions of Americans who cannot afford health insurance, and with no proven technologies for many of the chronic diseases like osteoarthritis, cataracts, blood vessel disease, infection and cancer, and given the fact that chronic disease will overwhelm the healthcare system as the baby boomers reach retirement age, the temples and priests of modern medicine must be replaced by home-based self care.

#### MULTIVITAMINS FOR EVERYONE BUT DOCTORS HAVE A LONG WAY TO GO

Responding to a growing body of scientific evidence of the health benefits of vitamin supplements and the fact that only one in five Americans consume the recommended five servings of fresh fruits and vegetables, in June of 2002 the American Medical Association did an about face and recommended multivitamins for everyone (Journal Am Med Assn 287: 3116-26, 2002). Below is a list of the 17 most frequently occurring generic substances mentioned during visits to office-based conventional doctors in the year 2000. Among 823 million visits to office-based conventional doctors in the year 2000, multivitamins were only mentioned during the office visit 1% of the time. As you can see, doctors have a long way to go.

SUBSTANCE	MENTIONED DURING OFFICE VISIT
Acetaminophen (Tylenol) pain reliever	39,903,000
Amoxycillin antibiotic	32,414,000
Hydrochlorothiazide (diuretic/water pills)	22,462,000
Estrogens	21,401,000
Thyroid hormone	19,751,000
Albuterol (asthma medication)	19,232,000
Ibuprofen (anti-inflammatory)	17,460,000
Loratadine (antihistamine/decongestant)	17,153,000
Atorvastatic (anti-cholesterol)	16,561,000
Guaifenesin (decongestant)	15,717,000
Lisinopril (Ace inhibitor/ blood pressure)	15,240,000
Aspirin	15,219,000
Furosemide (diuretic, water pill)	15,049,000
Codeine (analgesic, narcotic)	13,972,000
Atenolol (beta blocker, blood pressure)	13,746,000
Amiodipine (calcium blocker)	13,151,000
Multivitamins	12,525,000

Source: Advance Data No. 328, June 5, 2002, Center Health Statistics.

CONVENTIONAL MEDICINE	ALTERNATIVE MEDICINE	NUTRITIONAL MEDICINE
Claims scientific superiority; often unfounded	Marginal science Some exceptions	Decades of scientific backing
Office and hospital based	Office based	Home based
Best insurance reimbursement	Some insurance coverage	No insurance coverage for dietetic counseling or food supplements
Good at detection and diagnosis	Good at relating to patient	Good at getting patients to take responsibility for their health
Invasive	Non-invasive	Non-invasive
High-technology	Traditional technology (acupuncture, homeopathy)	Low-technology
Good at acute and emergent care	Sometimes useful for chronic conditions	Often useful for chronic conditions
Prescription drugs (man-made molecules)	Herbs, vitamins, minerals, amino acids, (natural molecules), diluted homeopathic remedies, aromatherapy	Herbs, vitamins, minerals, (natural molecules)
Generates most iatrogenic (doctor-induced) disease Relatively high-risk even when properly used	Low mortality rates from use or misuse	Low mortality rates from use or misuse

CONVENTIONAL MEDICINE	ALTERNATIVE MEDICINE	NUTRITIONAL MEDICINE
Long-term, will fail due to over-use of synthetic antibiotics and drug-resistance which will lead to reoccurrence of plagues	Boosts immunity to reduce risk of infection; i.e. mushrooms, trace minerals (selenium, zinc) and vitamins; natural antibiotics (garlic, etc.)	Boosts immunity to reduce risk of infection i.e. mushrooms, trace minerals (selenium, zinc) and vitamins; natural antibiotics (garlic)
Increases health care costs	May reduce health care costs	Lowers incidence of of disease

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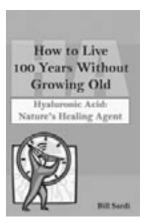
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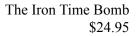
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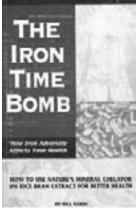
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