

PRINCIPLES
OF
HEALTHFUL
LIVING

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The physical world is governed by natural laws. Health and happiness are the direct result of cooperation with those principles. To be sick is to be out of harmony with natural law. This booklet will provide commonsense principles of good health derived from experience, accepted medical findings and even biblical revelation. It will help you to see the sorry state of the health of the average citizen and identify some of the cause-and-effect factors. It is not intended as a panacea for good health. But the principles contained herein, if practiced, will certainly provide a solid foundation for the building of physical health and welfare.



A SICK GENERATION

Picture for a moment an average American male, age 30. A person we will call "John Q. Citizen" for lack of a better name.

If John Q. is an average "red-blooded American," there is a fifty-fifty chance he is at least 10% overweight. That may not be a serious problem at present, but one that could easily "grow" on him. There is one chance in six that John Q. suffers from high blood pressure and possibly doesn't even know it. By the time he is 45, the odds are seven in ten that John Q. will suffer from at least one chronic disability. At age 50 he stands a 40% chance of losing all his teeth. When he reaches the ripe old age of 60 he could be the one person in five who gets hit by some form of heart disease. If he is a one-pack-a-day smoker, his odds will double. By the time he reaches

retirement age, his chances of being completely toothless will have risen to one in two. And before it is all over, John Q. will stand a 25% chance of contracting cancer in one of its many forms.

You would probably agree that the chances of his living the traditional threescore and ten with no major health problems are somewhat slim. And John Q. is only one among the millions who are continually being added to the ranks of the "walking wounded" in our modern Western society. Every year some 30 million Americans spend time in a hospital. Two million see a doctor every single day. Forty-two million experience severe headaches. Seventeen million suffer from arthritis or rheumatism, four million from diabetes, and twenty-two million from high blood pressure.

The mass mortality rates from modern degenerative diseases make modern warfare look tame in comparison. Every year over three times as many Americans die from cardiovascular disease as were lost in combat during the entirety of World War II. Another 355,000 annually succumb to cancer.

Younger Degeneration

Not all of these fatalities occur among the geriatric generation. Twenty-five percent of all cardiovascular victims are under 65 years of age. Signs of physical degeneration have even been found in the twenties age group. During the Korean War, a series of autopsies performed on soldiers with an average age of 22 revealed some degree of arteriosclerosis in over three-fourths of the cases. In 12% of this group, arterial obstruction exceeded the 50% level. And this was supposed to be the "cream of the crop."

Old age is far from being the only prerequisite for degenerative illness. According to Lewis Herber, author of *Our Synthetic Environment*: "Many an octogenarian has been found to have coronary arteries that a man in his forties would be fortunate to possess" (p. 7). Herber went on to say: "Many American males between 20

and 30 years of age are on the brink of major cardiac disease" (p. 8).

Nor does the fact that more people now survive childhood account for this increased incidence of degenerative diseases among adults. According to Gene Marine and Judith Van Allen, authors of *Food Pollution*: "It is not because of an improvement in the infant mortality rate that heart disease is now the leading cause of death, not only of the old, but of everyone over 45" (p. 34).

Once a person reaches middle age, his life expectancy is about the same as his counterpart who lived around the turn of the century. In one sense this means Western man has lost ground as far as the state of his overall health is concerned. Lewis Herber explains why: "Today, sanitation, housing, working conditions, and incomes have been improved greatly, while medicine has scaled undreamed of heights. . . . If it weren't for the extraordinary medical advances and great improvements in the material conditions of life, today's adult might well have a much shorter lifespan than his grandparents had. This is a remarkable indication of failure" (*Our Synthetic Environment*, p. 198).

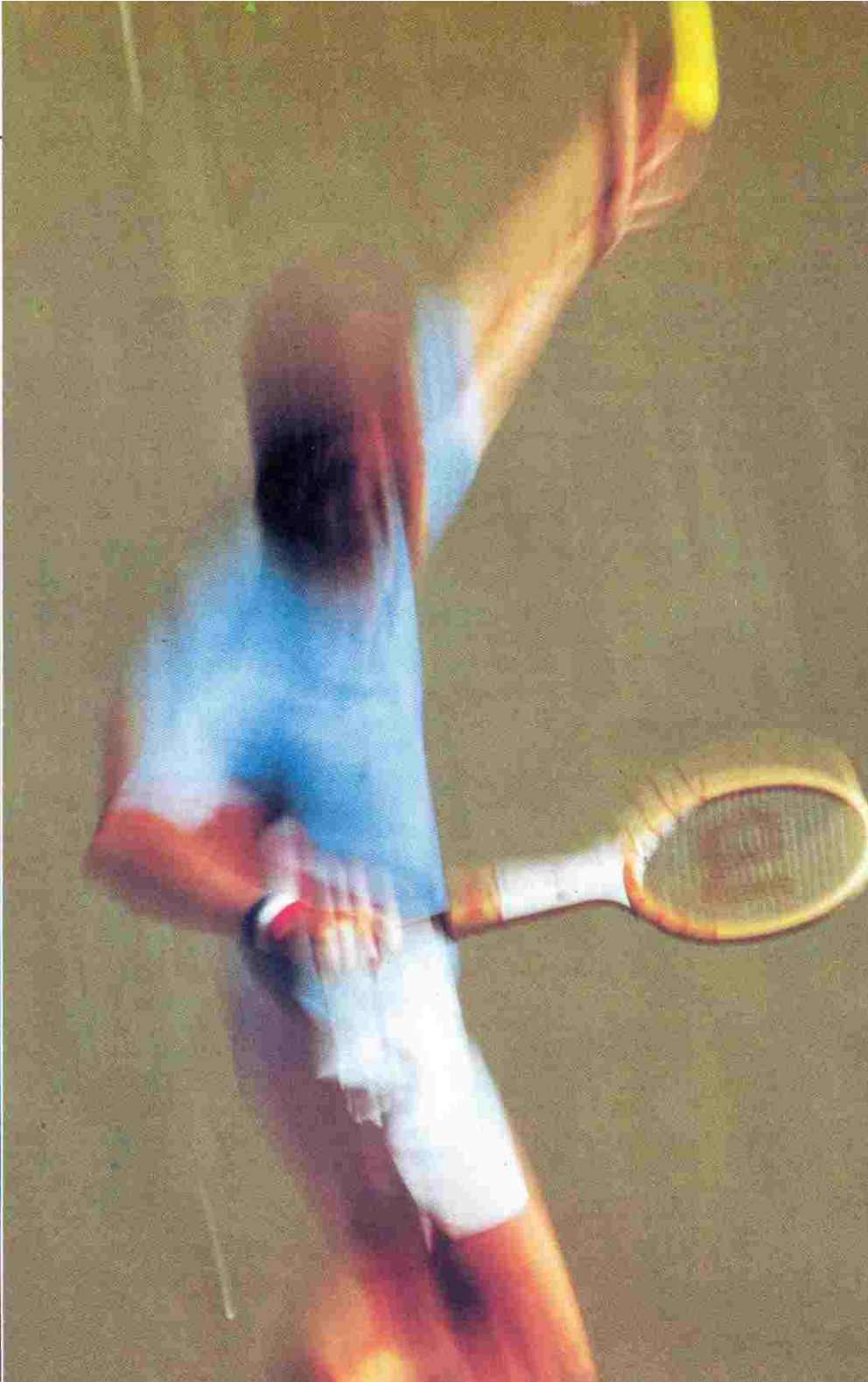
A Few Basic Principles

Since 1950, per capita medical expenses in the United States more than quadrupled. Yet the death rate has remained almost stationary. More medical dollars don't always result in better physical health. Lifestyle, exercise and dietary habits are really the key parameters in the health equation. Allan Chase, author of *The Biological Imperative*, explains: "Where and how well a person lives, makes his living, and eats has as much to do with his state of health and that of his children — as does anything a doctor can do for him" (p. 41).

Lewis Herber put it this way: "Whether he likes it or not,

there are 'rules of the game,' which must be obeyed if an environmental change is to advance human vigor, resistance to disease, and longevity. When these rules, simple as they may be, are transgressed, nature takes its revenge in the form of ill health and disease. When they are obeyed, man's life can be full, creative, and remarkably free of physical impairment" (*op. cit.*, p. 202).

The purpose of this booklet, then, is to discuss some of these basic ground rules that are essential to achieving robust and radiant health. No attempt will be made to give remedies for specific maladies or illnesses. That area is completely beyond the scope of this brief booklet.



FOOD AND FITNESS

The dietary habits of many people in the Western world has to go down as one of the supreme ironies of modern history. While millions in the underdeveloped world are malnourished because of necessity, many Westerners are often on the short end nutritionally purely due to choice.

A recent study conducted by the U.S. Department of Agriculture revealed that roughly one half of all Americans subsist on substandard diets. Junk foods account for some 35% of a typical American family's food budget. Fifty-five percent of what Americans eat is processed food — laden with dyes, preservatives, moisture controls, thickeners and the like. Sugar consumption in the affluent West is at an all-time high. In 1750 the average Englishman consumed only four pounds a year. Today

sweet-toothed Americans gulp down 120 pounds per person annually. Sugar now constitutes half of the average American's total calorie intake. The rapid rise in sugar consumption is just one more indicator that there has been a fundamental shift in our dietary habits. Dr. Jean Mayer, a leading nutritionist from Harvard University, made the following comments on current dietary habits in a recent interview: "Perhaps as much as half of the foods consumed in the home are no longer the primary foods like meats, milk, eggs, bread... vegetables, fruits which were bought at the supermarket. A great many of them are prepared...."

Vending machines, hamburger stands, drive-ins, ice-cream parlors, TV dinners and the like have all added to the problem. The example of what

happened to the Danes in World War I gives us fair warning as to where our highly processed food fads are taking us. According to the authors of *Food Pollution*: "During World War I, Denmark simply stopped refining flour. Later it was found that the death rate had dropped, and there had been a marked decline in cancer, heart disease, diabetes, kidney trouble and high blood pressure. No other marked change in diet or living habits had taken place" (p. 215).

Today Westerners are paying for their highly refined, emasculated diets with a rash of diseases such as diabetes, hypoglycemia, obesity, anemia, colon cancer, and kidney, liver and gallbladder malfunctions.

The price for poor nutrition costs in terms of dollars as well. Dr. George Briggs, nutritionist at the University of California, recently estimated that \$30 billion of America's annual \$75 billion medical bill was the result of poor nutrition.

Back to Basics

The obvious way to avoid such nutritional pitfalls is to avoid overconsumption of processed refined foods when possible. Fresh fruits and vegetables and whole-grain breads and cereals are not only

better for the constitution but usually easier on the food budget. Proper cooking methods can also help. Steaming at low temperatures rather than boiling can preserve much more of the value of your daily food fare. Dietary substitution may be of value also. For instance, you can eat fruits in place of candy, drink juices instead of soft drinks, and refrain from using refined sugar when honey or molasses will do as well.

Balance is another important factor in food intake. Overreliance on one basic food type can lead to future health problems. Unusual diets and overuse of food supplements should also be avoided unless a person gets proper medical and nutritional advice. As an example, a purely vegetarian diet may often lack in essential B vitamins as well as balanced proteins, unless very careful selection of foods is made. Excessive vitamin C supplements may be helpful for fighting colds, but can also lead to various digestive complications if wrongly administered.

Moderating one's intake is also a major dietary problem that plagues many living in an age where vigorous physical activity often is the exception rather than the rule. Centuries ago, the apostle Paul encour-

aged the Philippians to "let their *moderation* be known to all men." Solomon likewise warned against the consequences of overindulgence in both food and drink (Prov. 23:21).

Obviously every individual has to seek out his own optimum level of food intake. Numerous volumes have been written on the subject of dieting, so anything we could offer in this booklet would only scratch the surface of the subject. One key in any diet plan is to avoid a radical departure from your present eating habits. Before making any changes, be sure you have thoroughly researched your particular problem and have sought out proper nutritional and medical counsel as necessary.

The Lost Art of Physical Fitness

Someone once observed that most human progress from the Stone Age to the Space Age has sprung from man's earnest desire to avoid work. Certainly for the past two hundred years, we have hailed as "progress" ideas or inventions that reduced the need for human effort. Our definition of a "developed nation" implies one where muscle power has been largely replaced by machine power.

We measure the "quality of life" in terms of how easy our work is, how abundant our leisure time, and how many labor-saving gadgets we have at our disposal.

Before the advent of the Industrial Revolution, most people got plenty of exercise whether they wanted to or not. But today it can be all too easily avoided. Millions have adopted the philosophy of Robert Hutchin in Christopher Hale's *Exit Screaming*: "When I feel a desire to exercise, I lie down until it goes away." Consequently, muscles weaken and atrophy for lack of use. Bodies bulge with fat as the metabolic processes hoard excess calories in anticipation of activity that never comes.

Perhaps future anthropologists will look back at twentieth-century man and classify us as "sitters," because that is the dominant posture of our age. We sit in a car or bus on our way to work, where we sit at our desk for eight hours a day. Then we sit down again to travel home, where after sitting for dinner, we sit in front of the TV set for several hours. On weekends, for recreation, we sit in front of stages or movie screens to be entertained, or pay for the pleasure of sitting in the bleachers to watch paid

professionals get the exercise we so desperately need ourselves.

A Matter of the Heart

According to a two-year-old study by the President's Council on Physical Fitness and Sports, "45% of all American men and women do not engage in physical activities for the purpose of exercise." That leaves 55% who do — a majority. But Dr. Laurence E. Morehouse, founding director of the Human Performance Laboratory, University of California, Los Angeles, thinks the picture is actually gloomier than statistics indicate. In his best-selling book *Total Fitness in 30 Minutes a Week*, he states: "Newspapers and magazines make much of statistics indicating that millions of Americans are on a fitness kick. That isn't really true. . . . When the activities themselves are analyzed, it's apparent that at least eighty percent of the adult population isn't exercising sufficiently or properly to arrest physiological decay" (p. 18).

To understand why Dr. Morehouse came to this conclusion, we need to examine the words "physical fitness" and "exercise." Health and longevity don't depend exclusively on rippling muscles and slender contours. Rather, physical fit-

ness is determined by the condition of the heart, the size and elasticity of the arteries that feed blood to the heart, and the elasticity of the lungs.

The key, then, to a well-conditioned body is the circulatory system. No part of the body can survive, let alone thrive, without the service of the heart and bloodstream. It carries nutrient and oxygen to every cell of the body and exchanges them for waste materials, which it helps dispose of. It distributes hormones to regulate many bodily functions, and with the aid of white blood corpuscles, the bloodstream fights infectious diseases. Truly, as the Bible declares: "... The life of the flesh is in the blood" (Lev. 17:11, RSV).

The Bible also tells us we should exercise regularly and moderately throughout our lives. I Timothy 4:8, correctly translated, shows that bodily exercise profits "for a little while" — that is, in this life. The right kind of exercise improves the functional capacity of the heart and the circulation. The key phrase is "right kind."

Play vs. Exercise

Unlike food, which we often describe at rapturous length and prepare using innumerable recipes, we seldom bother to

break exercise down into its many different types. "I think I'll get some exercise," we say as we jog out the door. Or, "Now that summer is here I hope to get a lot of exercise in the garden."

Are gardening and jogging the same? Hardly, but we rarely differentiate — especially in discussing exercise needed for good health.

There are exercises for strength — such as weight lifting. There are sports and games of skill such as baseball and bowling. But when health experts talk about exercise for physical fitness they are primarily concerned with exercises that help the heart and control weight.

In looking at the physically active 55% of the population, Dr. Morehouse saw that most people were not engaged in the kind of exercise that conditions the body. Bowling, golf, softball and volleyball rank among the most popular sports people participate in, but none of these have the sustained level of activity needed for proper conditioning.

"At the risk of being immediately deported," wrote Dr. Jean Mayer, professor of Nutrition, Harvard University, in *Family Health* (July 1973), "let me say that neither baseball nor football is, by itself, a good body

conditioner. And let me add certain games of skill to this list, games that are great entertainment but are no longer physical exercise. For instance, if you play golf out of a golf cart, or shoot at clay pigeons on a rifle range, or take up archery, you are not really exercising; you're just playing."

This doesn't mean that exercise must be all work and no play. You don't have to throw away your golf clubs or bowling ball in favor of jogging by the dawn's early light and sweating through a regime of calisthenics. The point is to realize that not all exercise is of equal value to the conditioning of the body.

Choosing a Conditioner

If you seek to reduce your waistline, improve your wind, or build a few muscles, here are some suggestions in selecting an exercise program:

- 1) If you are seriously overweight and/or over 30 years of age, you should consult with your doctor before starting any program. Exercise can condition the body — but strenuous exercise can also kill if not built up to gradually.

- 2) Read widely on the subject of exercise. Programs and methods are as varied as the people who write about them. Get a feel for the different

approaches and schools of thought; be wary of any regime that makes extravagant promises or radical demands on your way of living. There is no one magic method to good health. You don't have to adopt a Spartan existence to be physically fit.

3) Select a program that is right for you — that fits your lifestyle, not someone else's.

A professional football player needs a lot of endurance and strength to earn his salary. Chances are, you don't. So his physical fitness program is not for you. What you need is a program that enables you to feel well and cope with the stresses and rigors of your life. What

you want is exercise tailored to your personality and to the time you have available.

Some people like rugged games and activities requiring a lot of exertion — such as soccer, basketball and weight lifting. Others prefer tennis, swimming, or bicycling. Exercise is highly individualistic; one of the most common pitfalls that leads to discouragement and failure is to choose a program tailored to someone else.

But the main thing you should remember is that your body needs some form of exercise. Failure to keep it in reasonable trim could lead to significant health problems in the future.

EMOTIONS AND YOUR HEALTH

Psychosomatic illness — the term conjures up visions of fleeting aches and pains the doctor can't diagnose, people who call in sick on Monday morning, and the hypochondriac who had his tombstone inscribed, "I told you I was sick."

But contrary to this popular image, psychosomatic illness is *not* "all in your head." In fact, you can die from a psychosomatic illness as well as from any other kind. And in reality, the "other kind" of illness may be extremely rare.

Psychosomatic (or as one author termed it, "emotionally induced") illness probably accounts for over 50% of all cases doctors see — and some estimate that as much as 90% of all illness is precipitated by unhealthy emotions. So, far from being a figment of some hypo-

chondriac's imagination, emotionally induced illness is something we *all* suffer from at one time or another.

Thousands of years ago, King Solomon wrote that "a broken spirit dries up the bones." So the Bible recognizes the link between what goes on in our heads and the condition of our bodies.

Stress and Health

But how can what we think make us sick or healthy? Doesn't a person get sick because he comes into contact with a germ when he is injured, or fatigued, or his resistance is low?

Yes, in part. But what makes a person's resistance low? What weakens his body to such an extent that germs can mount a successful attack? Research sci-



entists have discovered that *stress* (defined as wear and tear on the body produced by any activity) can be produced by feelings and emotions.

How does this happen? Experiments have shown that every emotion automatically produces certain *physical* changes in our bodies. One dramatic example of this was a man who had a surgical opening made in his stomach following an accident. This made it possible for doctors to observe the changes that occurred under different circumstances. When he was upset, "His stomach became red and engorged, and soon the folds were thick and turgid. Acid production accelerated sharply and vigorous contractions began" (*Effective Psychology for Managers*, Mortimer Feinberg, p. 92).

How do such dramatic changes come about? Here is how scientists explain it: "Whenever you are in a situation of threat, your body prepares to flee or to fight. In moments of peril everything gets into the act. First, messages from your eyes or ears get carried to the pituitary gland

located at the base of the brain. [It] secretes a substance known as ACTH into the bloodstream. ACTH triggers the adrenal glands, located above the kidneys, which further secrete . . . cortisone. Then everything within the body pops. The heart beats rapidly. Muscles of the stomach and intestines contract, forcing the blood to circulate faster. Breathing speeds up. You are ready for the enemy" (*ibid.*, p. 91).

If the provocation is only minor — if it is not necessary to fight, then the body undergoes this stress for no good reason. You can't punch your boss in the nose for criticizing your work, so you suffer quietly while your stomach ulcerates.

After being battered by enough negative emotions, the body breaks down at its weakest point and illness results. The list of diseases directly brought on by emotions is seemingly endless. Everything from colds to cancer has been attributed to mentally induced stress. And in between in seriousness are such maladies as arthritis, asthma, fatigue, hay fever, headaches, high cholesterol, heart attacks and circulatory disorders, hypertension, hives, insomnia and ulcers.

Your mind can make you ill. But the reverse is also true. As

BIOFEEDBACK training instruments monitor brain waves, muscle tension, body temperature and galvanic skin response.

Proverbs and Psychosomatics

The book of Proverbs has a lot to say about the connection between emotions and health. Below are excerpts from Proverbs on this subject, quoted from the Revised Standard Version.

"Be not wise in your own eyes; fear the Lord, and turn away from evil. It will be healing to your flesh and refreshment to your bones" (3:7, 8).

"A man who is kind benefits himself, but a cruel man hurts himself" (KJV: "troubleth his own flesh"). (11:17)

"There is one whose rash words are like sword thrusts, but the tongue of the wise brings healing" (12:18).

"Anxiety in a man's heart weighs him down, but a good word makes him glad" (12:25).

"Hope deferred makes the heart sick, but a desire fulfilled is a tree of life" (13:12).

"A tranquil mind gives life to the flesh, but passion [KJV: 'envy'] makes the bones rot" (14:30).

"Better is a dinner of herbs where love is than a fatted ox and hatred with it" (15:17).

"The light of the eyes rejoices the heart, and good news refreshes the bones" (15:30).

"Pleasant words are like a honeycomb, sweetness to the soul and health to the body" (16:24).

"Better is a dry morsel with quiet than a house full of feasting with strife" (17:1).

"A cheerful heart is a good medicine, but a downcast spirit dries up the bones" (17:22).

"A man's spirit will endure sickness; but a broken spirit who can bear?" (18:14)

"A man without self-control is like a city broken into and left without walls" (25:28).

Solomon wrote: "A merry heart doeth good like a medicine," and "A tranquil mind gives life to the flesh."

Just as negative emotions can wear the body down, positive feelings can build it up. And we now know that people have a lot more control over the way their bodies function than was previously thought possible.

Mind over Matter?

The link between mind and body has been intensively explored in recent years. One resulting field of study is called *biofeedback*, which has given us new insights into how the human body functions.

But just what is biofeedback? Dr. Marvin Karlins explains it this way: "It is simply a particular kind of feedback — feedback from different parts of our body: the brain, the heart, the circulatory system, the different muscle groups and so on. Biofeedback training is the procedure that allows us to tune into our bodily functions, and, eventually, to control them" (*Biofeedback*, p. 24).

How does it work? "In a typical biofeedback training session, a subject is given this feedback by hooking up with equipment that can amplify one or a number of his body signals and translate them into readily ob-

servable signals: a flashing light, the movement of a needle, a steady tone, the squiggle of a pen. Once a person can 'see' his heartbeats or 'hear' his brain waves, he has the information he needs to begin controlling them" (*ibid.*, pp. 24-25).

Before biofeedback, it was believed that the autonomic nervous system (controlling breathing, heartbeat and other automatic functions) couldn't be consciously controlled. But research has proven this wrong.

Patients have taught themselves to lower their blood pressure, increase poor circulation to their extremities, prevent migraine headaches and overcome insomnia through experimental training. In other words, they have cured themselves of various conditions formerly thought beyond their control.

But do-it-yourself cures are nothing really new — they have been around for years. Before modern pharmacology had developed to its present level, doctors relied heavily on *placebos*, or harmless sugar pills. These were dispensed to treat various ailments for which they had no specifically effective medicine. Just like the natives who trusted their local jungle witch doctor, these "civilized" patients got satisfactory relief over 50% of the time.

The Holmes Stress Scale

Psychiatrist Thomas H. Holmes of the University of Washington School of Medicine has developed a scale to measure the relative stress induced by various changes in a person's life. The amount of stress is measured on a point scale of 200 "life-change units." Studies by Dr. Holmes and his associates show that if you accumulate more than 200 units in a single year your life has probably been disrupted enough to make you vulnerable to illness.

Event	Scale of Impact		
Death of spouse	100	Son or daughter leaving	
Divorce	73	home	29
Marital separation	65	Trouble with in-laws	29
Jail term	63	Outstanding personal	
Death of close family		achievement	28
member	63	Wife begins or stops	
Personal injury or illness	53	work	26
Marriage	50	Begin or end school	26
Fired at work	47	Change in living conditions ...	25
Marital reconciliation	45	Revision of personal habits ...	24
Retirement	45	Trouble with boss	23
Change in health of family		Change in work hours or	
member	44	conditions	20
Pregnancy	40	Change in residence	20
Sex difficulties	39	Change in schools	20
Gain of new family member ...	39	Change in recreation	19
Business readjustment	39	Change in church activities ..	19
Change in financial state	38	Change in social activities	18
Death of close friend	37	Mortgage or loan less than	
Change to different line		\$10,000	17
of work	36	Change in sleeping habits	16
Change in number of arguments		Change in number of family	
with spouse	35	get-togethers	15
Mortgage over \$10,000	31	Change in eating habits	15
Foreclosure of mortgage		Vacation	13
or loan	30	Christmas	12
Change in responsibilities		Minor violation of the	
at work	29	law	11

The placebo's healing effect was not due to some mystical faith in the doctor or even will-power. Rather the patients were exercising a certain amount of voluntary mental control over their health. Placebos seemed to reinforce a positive attitude in the patient that he will recover quickly. This emotion or feeling of well-being in turn stimulated the body to produce hormones conducive to repairing disease-caused damage.

Life, Liberty and Longevity

How can we translate these findings into practical ways to prolong life and avoid illness?

The book of Proverbs shows that what doctors and scientists refer to as a "positive mental attitude" can go a long way toward making one's life long and pleasant (see page 16).

This isn't just one ancient philosopher's opinion, either. Dr. Hans Selye, director of the Institute of Experimental Medicine and Surgery at the University of Montreal, and author of a number of books on stress, said the following: "There exists a close relationship between work, stress and aging. Aging results from the sum of all the stresses to which the body has been exposed during a lifetime. Each period of stress — espe-

cially if it derives from frustrating, unsuccessful struggles — leaves some irreversible chemical scars, which accumulate to constitute the signs of tissue aging. But successful activity, no matter how intense, leaves you with comparatively few such scars. On the contrary, it provides you with the exhilarating feeling of youthful strength, even at a very advanced age. Work wears you out mainly through the frustration of failure. Many of the eminent among the hard workers in almost any field have lived a long life... well into their seventies, eighties or even late nineties. They lived... a life of constant leisure by always doing what they like to do" (*Stress Without Distress*, p. 96).

Notice how Dr. Selye's words parallel the advice in the book of Ecclesiastes: "Go, eat your bread with enjoyment, and drink your wine with a merry heart... Let your garments be always white; let not oil be lacking on your head. Enjoy life with the wife whom you love, all the days of your vain life... because that is your portion in life and in your toil at which you toil under the sun. Whatever your hand finds to do, do it with your might..." (Eccl. 9:7-10, RSV).

But very few of us find our

selves doing something we really enjoy "with our might." Dr. Selye agrees and adds that "Few people belong to this group of the creative elite; admittedly, their success in meeting the challenge of stress cannot serve as a basis for a general code of behavior. But you can live long and happily by working hard along more modest lines if you have found the proper job and are reasonably successful at it" (*op. cit.*, pp. 96-97).

Health and Hope

Occupying one's life with enjoyable activities is important, but in order to do so one has to be in control of his life. If he isn't, trouble is ahead in the form of depression and resulting disease.

E. P. Seligman stated: "I believe that depression, the common cold of psychopathology, is really the belief in one's own helplessness. In psychological postmortems of 26 sudden, unexpected deaths among Eastman Kodak employees, depression was the dominant state of mind. When these depressed persons became anxious or angry, they had heart attacks"

Here is where belief — faith and hope — enter the picture. If a person can make scriptures like Romans 8:28-31 ("We know that all things work together for good to them that love God If God be for us, who can be against us?") a part of his life, he will be much less likely to become depressed, ill, or to die from the effects of hopelessness.

The Bible is filled with information on how to maintain a hopeful, happy, tranquil mind. But one of the best summaries is found in Philippians 4:4-8 (RSV): "Rejoice in the Lord always; again I will say, Rejoice Have no anxiety about anything, but in everything by prayer and supplication with thanksgiving let your requests be made known to God. And the peace of God, which passes all understanding, will keep your hearts and your minds in Christ Jesus. Finally, brethren, whatever is true, whatever is honorable, whatever is just, whatever is pure, whatever is lovely, whatever is gracious, if there is any excellence, if there is anything worthy of praise, think about these things."

BIBLICAL HEALTH LAWS - STILL AHEAD OF THEIR TIME

There is a Creator God. He “manufactured” the human race. And He wrote an “Instruction Book” that goes along with His product, telling how the human body and mind best function. Just as any automobile manufacturer sends an instruction book along with each new automobile, so God gave us an Instruction Book — the Bible — which tells us how to live, and even gives some guidelines on how to have robust health and vitality.

The Bible is the foundation of all knowledge, and it includes many commonsense principles of good health.

Sanitation and Hygiene

The Old Testament contains many injunctions which relate

to health. If they had been put into practice, the world’s disease toll would have been drastically cut. Until the close of the 17th century, however, hygienic conditions in cities were generally deplorable. Excrement and filth were often dumped into the streets. Flies, breeding in the filth, spread and carried disease to millions.

The principle of burying excrement and filth was given by the Scriptures over 1400 years before Christ. In Deuteronomy, God told Moses and the children of Israel: “You shall have a place outside the camp and you shall go out to it; and you shall have a stick with your weapons; and when you sit down outside, you shall dig a hole with it, and turn back and



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cover up your excrement" (verses 23:12-13, RSV).

Says medical historian Arturo Castiglioni: "The regulations in Deuteronomy as to how soldiers should prevent the danger of infection coming from their excrement by covering it with earth constitute a most important document of sanitary legislation" (*A History of Medicine*, p. 70). Castiglioni continued: "Study of Biblical texts appears to have demonstrated that the ancient Semitic peoples, in agreement with the *most modern tenets of epidemiology*, attributed more importance to animal transmitters of disease, like the rat and the fly, than to the contagious individual" (p. 71).

Three thousand years later, when the bubonic plague devastated Europe, this knowledge had generally been lost. Some blamed noxious fumes in the air; others attributed it to the stars; some thought it was caused by a conjunction of Mars, Jupiter and Saturn; yet others blamed the Jews, and many blamed God.

Generally, the world did not wake up to the importance of

hygiene and cleanliness until about the end of the 18th century. Yet vital principles of sanitation and cleanliness were expounded by God to Moses almost 3,500 years ago.

The biblical laws of cleanliness, washings and purification were not all merely customs or rituals. They protected the camp of Israel from the dangers of contagious diseases and deadly plagues.

States Dr. D. T. Atkinson: "In the Bible greater stress was placed upon *prevention* of disease than was given to the treatment of bodily ailments, and in this no race of people, before or since, has left us such a wealth of laws relative to hygiene and sanitation as the Hebrews. These important laws, coming down through the ages, are still used to a marked degree in every country in the world sufficiently enlightened to observe them. One has but to read the book of Leviticus carefully and thoughtfully to conclude that the admonitions of Moses contained therein are, in fact, the groundwork of most of today's sanitary laws. As one closes the book, he must, regardless of his spiritual leanings, feel that the wisdom therein expressed regarding the rules to protect health are superior to any which then existed

POTENTIAL harbinger of disease, refuse piles up on New York City street during garbage collector's strike.

in the world and that to this day they have been little improved upon" (*Magic, Myth and Medicine*, p. 20).

Unfortunately, even in our modern world we sometimes ignore the vital importance of sanitation and hygiene in combating and preventing illness and contagion. Our modern cities are becoming increasingly congested, polluted, filthy and dirty. Garbage strikes pose serious health problems. Our air is becoming unfit to breathe because of pollution; and our water is becoming increasingly contaminated with industrial chemicals, urban wastes and a host of modern pollutants unheard of even twenty years ago.

Bible Dietary Laws

As we read in chapter two, proper diet is important in the prevention of disease. Leviticus 11 enumerates the dietary laws which God gave ancient Israel. Among other things, He forbade them to eat the flesh of pigs (swine), rabbits or shellfish (Lev. 11:6-12).

Writes Dr. Louis Lasagna: "Many of these make good medical sense. . . . The prohibition of hare and swine as sources of food certainly must have diminished the incidence of disease, in view of the capacity of these animals to transmit

tularemia and trichinosis, respectively. The transmission of gastrointestinal infections (including typhoid fever) via polluted shellfish or water also testifies to the apparent wisdom of the Hebrews in warning against such sea food and impure water" (*The Doctors' Dilemmas*, p. 85).

Another interesting Old Testament law forbade the eating of animal fat. This also has proven a valuable health practice. Dr. Paul Dudley White, the heart specialist who treated President Eisenhower while he was in the White House, once quoted Leviticus 7:23: "You shall eat no fat, of ox, or sheep, or goat" (RSV). Animal fats are high in cholesterol, a fatty, waxy material which the body needs in limited amounts. The body's inability to properly metabolize cholesterol in some cases, however, may be a contributing factor in some forms of heart disease. Therefore, Dr. White asserted: "It is conceivable that a few years from now we medical men may repeat to the citizens of the United States of America the advice that Moses was asked by God to present to the children of Israel 3,000 years ago."

If you would like more information on this subject, write for our free article "Is All Ani-

mal Flesh Good Food?" It will explore the application of these dietary laws to our present generation.

The Bible vs. Venereal Disease

The fastest-spreading contagious disease in the Western world today is venereal disease. In the United States, someone contracts venereal disease every 15 seconds.

Medical authorities know that V.D. is spread through sexual contact. Homosexuals account for nearly one fifth of the reported cases. As long as there is promiscuity and free sex, there is bound to be venereal disease. But the solution to this terrible worldwide curse is as simple as it is ancient: "Shun immorality! Any other sin that a man commits is outside the body, but the immoral man sins against his own body" (I Cor. 6:18, Moffatt translation).

The growing incidence of this ancient plague speaks eloquently of the need for prevention. Thousands of years ago, biblical standards of morality safeguarded against this plague that can blight the lives of yet unborn generations. There is no safe, reliable cure for this disease — except prevention. When God created mankind, He said: "Therefore shall a man leave his father and

his mother, and shall cleave to his wife: and they shall be one flesh" (Gen. 2:24). If this one basic scriptural principle of faithful monogamy were followed today, the world would see the end of venereal disease.

Laws of Quarantine

During the 14th century, bubonic plague struck Asia and spread to Russia, Persia, Turkey, North Africa and Europe. Perhaps one third of the European population died in those tragic years. Relentlessly, the plague invaded every city, hamlet or village. Millions lost their lives to the "grim reaper." Panic and confusion were rampant. Death was everywhere. The toll was so great that bodies were thrown into huge pits, mass graves.

The Jewish physician Bala-vignus lived in those times and saw that miserable sanitation was a major factor in the spread of the disease. He instituted a cleanup movement among the Jews. The rats, consequently, left the Jewish ghettos and moved into the "Gentile" sectors of the city. As a result, the Jews' mortality rate from the plague was only five percent of what it was among their non-Jewish neighbors.

The general population soon saw the difference, but instead

of emulating the Jewish hygienic measures, the people began accusing the Jews of causing the plague and poisoning wells. A general massacre was launched. Balavignus himself, persecuted and tortured, was finally compelled to "confess" that he and others were responsible for the disease.

How was the Black Death finally conquered? Declared David Riesman, professor of the history of medicine at the University of Pennsylvania: "Isolation of the sick and quarantine came into use. These practices not only eliminated the plague as a pandemic menace for the first time in history but also led to general laws against infectious diseases, thereby laying the foundations upon which modern hygiene rests" (*Medicine in the Middle Ages*, p. 260).

Another plague which prevailed in the 13th and 14th centuries in Europe was leprosy. England, Sweden, Iceland and Norway showed alarming gains in the numbers of leprosy cases in the 15th and 16th centuries. But when the authorities began to institute the quarantine, in the form of segregation of leprosy cases, the plague was again brought under control.

In Norway rigid national quarantine was introduced in

1856 because of the widespread severity of leprosy. "Ninety years later the health authorities were able to report that Norway had only five percent of the number of lepers that were there before segregation. Similarly favorable reports come to us from Finland and Sweden, where enforced segregation of lepers had also been instituted," writes D. T. Atkinson (*Magic, Myth and Medicine*, p. 64).

Where did these quarantine laws come from?

This same author tells us: "It is most singular that a description of leprosy, as found in the thirteenth chapter of Leviticus, could have been written so long before our time. It is to be noticed that such an accurate description of this dread malady as it appears in the Biblical narrative is not to be found in the literature of any nation for the next seventeen hundred years" (*ibid.*, pp. 25-26).

Speaking of the biblical laws regarding leprosy, Atkinson states: "The laws of health laid down in Leviticus are the basis of modern sanitary science. Moses ordered that cases of leprosy should be segregated, that dwellings from which infected Jews had gone should be inspected before again being occupied, and that persons

recovering from contagious disease were not to be allowed to go abroad until examined. The modern quarantine harks back to these sanitary regulations of the Old Testament" (p. 58).

Similarly, Arturo Castiglioni in *A History of Medicine* tells us, "The laws against leprosy in Leviticus 13 may be regarded as the first model of a sanitary legislation" (p. 71).

These historical examples graphically demonstrate the effectiveness of the principles God handed down millennia ago. Strictly speaking, of course, the Bible is not a health textbook or medical manual. But it does lay the foundation of knowledge, and reveals many health laws which mankind has required thousands of years to rediscover.

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