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THE NATIONAL HEALTH JOURNAL

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By JAMES WATT, M.D., Director
National Heart Institute

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Life and HEALTH

THE NATIONAL HEALTH JOURNAL

contents

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CHANGE OF ADDRESS: Send to **LIFE AND HEALTH, Circulation Department, Washington 12, D.C.,** at least 30 days before date of the issue with which it is to take effect. Pelase send us your old address with your new one, enclosing if possible your old address label, to avoid error in old and new lists.

OUR COVER PAGE

Kodachrome by J. Byron Logan.—Most of us are aware of the need and the importance of a frequent motor checkup on our cars. Such checkups are vital to the proper functioning and long life of the car. A poorly adjusted carburetor may cause stalling. The battery may be run down. The brake lining may need renewing, and lights and tires need to be checked. The neglect of any one of these, and a number of other items, on a car may cause serious trouble to the driver, and even to others.

We do not live to ourselves. For our own sakes, and for the sake of our loved ones, a health checkup is essential. It may reveal some lurking unsuspected trouble, which if attended to in time would save your life. See your doctor at least twice a year. An ounce of prevention is worth a pound of cure.

LETTERS to the Editor

REFRESHED

DEAR EDITOR:

Your magazine lifts us spiritually and makes me feel refreshed after reading it.

JEANNETTE SNYDER
Springfield, Ohio

OVERCOMING TENSION

DEAR EDITOR:

Several months ago your magazine, LIFE AND HEALTH, began coming to me. I can't tell you how very much I have enjoyed each issue.

In a recent issue there was an excellent article about overcoming tension, with some helpful suggestions. However, I recently found quite another solution.

My answer to this problem has been God. I have a reminder when tensions arise: Pray. Although I do set aside a regular time daily for prayer, this little reminder has made me constantly alert that especially in tense moments I am in need of God. My husband will testify to the fact that life in our household is indeed more pleasant since my irritability has been eliminated.

MRS. G. S.
Rock Falls, Illinois

YOUR OPINION, PLEASE

You are invited to comment on LIFE & HEALTH articles. Which one took your fancy? Did you take exception to something you read?

If you have a suggestion for an article by a doctor, nurse, or dietitian, drop us a note. Address:

READERS' PULSE
LIFE & HEALTH
Washington 12, D.C.

MEDICAL SCIENCE

DEAR EDITOR:

I like your articles that give me information on what medical science is actually doing about our serious diseases. The article "Cancer, Where We Stand Today," by John R. Heller, M.D., of the National Cancer Institute, was not only informative but it gave the bright side of the cancer story.

Too many people are afraid of cancer but don't know what they can do to fight it. I know a woman personally who worries about symptoms for months without doing anything about them. Every symptom she was concerned about proved to be nothing serious. Now she has a new set of worries, but still won't see her doctor.

It is a good thing for us to know what men like Dr. Heller are doing to solve our problems. I would rather know what to do than sit around worrying about something that cannot be helped but doing nothing constructive. It takes all kinds.

JOAN CREWE
Stockton, California

KNOWS *LIFE AND HEALTH*

DEAR EDITOR:

I think I know LIFE AND HEALTH quite well, having seen my first copy more than twenty-five years ago. I thought then that it was one of the most instructive magazines I had ever seen, and I still think so.

Your article on "Cold Mitten Friction" [by Mary Catherine Noble, R.N., in the November, 1959, issue] is familiar to me. I have been taking these friction treatments every morning, and they do me a world of good. By getting a boost to my circulation every morning I feel that surely my general health will be benefited.

I start out to work on the coldest morning warm and full of pep. The cold weather only makes me feel better after my cold mitten friction. It's unbelievable what it does for me. I'm positive it keeps me younger because it keeps my body tone up to a good pitch.

MRS. B. F. KALLEGAN
Butte, Montana

SEND *LIFE AND HEALTH* OVERSEAS

DEAR EDITOR:

We all enjoy LIFE AND HEALTH very much. After we pass it around through the family, we send your magazine overseas to people in remote Far Eastern villages.

MRS. GLADYS H. WOOD
Coronado, California

March of Medicine

Rabbit Fever

If you skin or clean wild animals, you may be in danger of acquiring rabbit fever. According to a health column in *Today's Health,* published by the American Medical Association, rabbit fever (tularemia) is one of 83 diseases of animals transmissible to man.

The disease is common in rabbits, field mice, skunks, opossums, squirrels, coyotes, and other small animals. It is fatal to the animals. If an animal seems unusually tame or runs sluggishly when flushed, he may have tularemia, and hunters should be wary of killing and taking the animal home.

The article said that hunters, housewives, and vendors who skin and clean infected animals can acquire the disease through a break in the skin or even apparently unbroken skin. Symptoms in humans include headache, chills, fever, general weakness, backache, joint pain, and prostration.

Antibiotics can cure the disease, but the column listed certain precautionary procedures that include wearing rubber gloves when skinning animals, washing blood from the skin with plenty of soap and water, then using a disinfectant, calling your doctor and going to bed if you think you have tularemia.

☆ ☆ ☆

Fake Remedies for Deafness

The public is warned to beware of unscrupulous promoters of drugs, gadgets, and methods of manipulation designed to "cure" deafness.

The warning comes from the American Hearing Society, which observes Better Hearing Month in May.

Crayton Walker, executive director of the society, says, "Claims to the discovery of drugs, gadgets, and methods of manipulation that 'cure' deafness are misleading and may often prove dangerous. People responsible for advertising such 'cures' prey on the fears and hopes of the deaf.

"The American Hearing Society and its member organizations in 32 States and the District of Columbia have for years carried on a vigorous campaign to warn the public to beware of these so-called cures for head noises, deafness, or other disorders of the ears."

According to Mr. Walker, today's quacks use half-truths, misleading implications, questionable deductions, and often outright falsehoods not easily detectable by the average person, to sell their products.

Mr. Walker said, "These so-called cure advertisements have a tremendous effect on the deafened, who through false pride try to keep their affliction from their family, friends, relatives, and business associates. Because of this false pride, they are ready victims of the charlatan—often with disastrous results to a hearing defect that might have been remedied through orthodox methods."

Mr. Walker urged those with hearing trouble to consult their family doctor or an ear specialist, or get in touch with the local hearing society or the American Hearing Society, 1800 H Street, NW., Washington 6, D.C.

Arthritis Medicine

A medicine manufactured from the Mexican yam and ox bile was announced as a more effective medicine than even cortisone in relieving the pains of arthritis. The beauty is that it can be given at lower dosage with far fewer side effects.

The medicine, dexamethasone, is 40 times as powerful as cortisone. It was somewhat unexpectedly discovered while research was going on for a promising new anesthetic at the National Institute of Arthritis and Metabolic Diseases and in laboratories of major pharmaceutical companies.

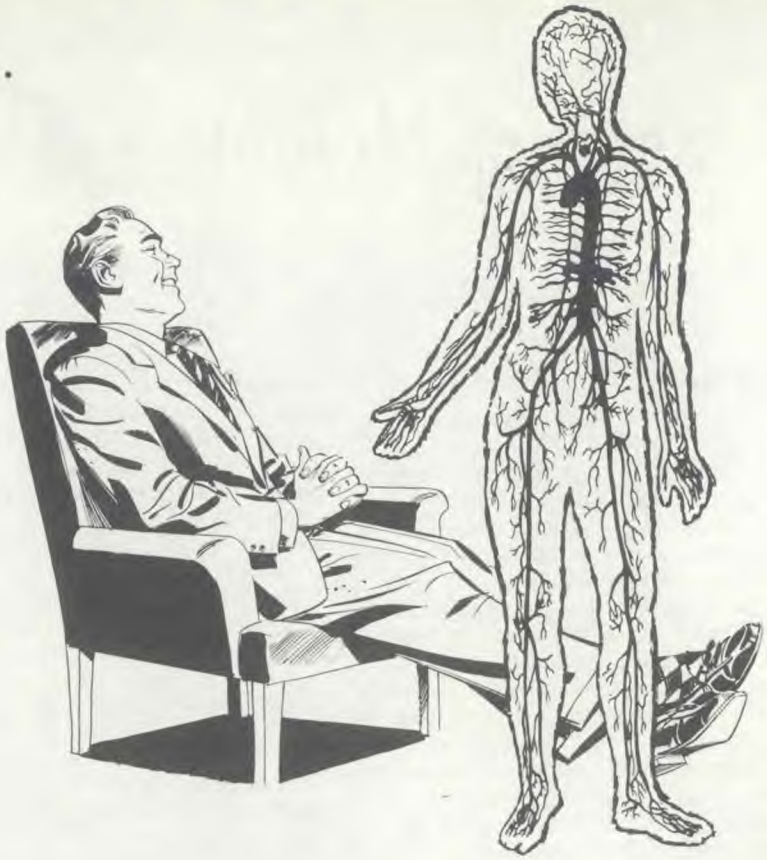
Schering Corporation and Merck and Company are now manufacturing the product.

Among the advantages of the new medicine is the fact that it does not cause waterlogging, or edema, of the tissues, puffiness of the face and limbs. Unfortunately it is not a cure for arthritis, but does suppress the inflammation and the symptoms.

Like cortisone, it must be used strictly under a physician's prescription and observation, for the medicine may have a tendency to produce ulcers unless antacids are taken in conjunction with it. It may even trigger mental illness and make bones more subject to fracture.

The medicine is not indicated in cases of osteoarthritis, the degenerative wear-and-tear type of arthritis of older persons.

YOUR HEART



NOT long ago we all read in the newspaper of the shocking death of movie actor Tyrone Power at the age of 44 while working on a movie set in Spain. The cause: heart attack.

Unfortunately, modern man has come to take his heart for granted. We disregard periods of rest, thinking that our heart is made of iron and that a heart attack can't happen to us.

It is happening to captains of industry, big business executives, and high government officials each year. They are numbered among the 700,000 yearly victims of heart and blood vessel disease. Too often, disregard of nature's precious pump costs the nation some of its most important leaders long before their appointed hour. Admiral Forrest P. Sherman, chief of naval operations, at 54. Cause: heart attack. Francis Adams Preslow, former head of the New York Curb Exchange, at 45. Cause: heart attack.

No one is immune to this malady, for it strikes at the highest post in the land—we all recall the fateful day when the headlines read, "President Dwight D. Eisenhower stricken with heart attack." Fortunately, with good medical care heart patients can be given a second chance. President Eisenhower is a perfect example of this.

Let's take a look at your heart and see what a respectable organ it is. Beating within your breast at this moment is the world's most efficient pump. This organ (about the size of your fist), on which your life depends, is one of nature's marvels. Its rhythmic beats send about six quarts of blood on a round trip through your body every minute. In this beat-by-beat process, this tiny 1/170 horsepower engine in a day's time expends enough energy to bounce a 150-pound man to the height of the Empire State Building—an estimated 10 tons of blood passing through your heart every 24 hours.

Through the doctor's stethoscope your heart sounds like this: a steady rhythm of "Lubb dupp, lubb dupp," the sound of life itself, as blood courses through the valves of the heart chambers.

This inimitable little pump beating 100,000 times daily keeps the blood coursing through your vessels 24 hours a day without letup. It has more sense than you do, for it rests between each beat. In 70 years it will beat no less than 2.5 billion times without a single pause for overhauling or repair.

Your heart is the world's most perfect example of perpetual motion. Once the spark of life has started it on its lifetime job of pumping, it ceases only between beats until it stops for good.

The good Lord made your heart tough so that it can take it. It is able to take this beating by resting between beats, for it works only during contraction. You and I should take a tip from our heart and rest more than we work. The daily program of 8 hours for work, 8 hours for sleep, and 8 hours for eating, relaxation, reading, and enjoying life is the balanced plan of the Creator.

Whether you're a highly paid executive or a domestic worker, your heart demands the same care. If properly tended, it will keep you going until that 2½ billionth beat at the age of 70 or beyond.

Yours for continuing health,

J. DeWitt Fox, M.D.

James Watt, M.D. ("The National Heart Institute," page 18), director of the National Heart Institute since 1952, has spent most of his professional life conducting and administrating medical research and public health activities.

Besides administering the diversified programs of the National Heart Institute, Dr. Watt enjoys a close working relationship with the American Heart Association. He is a member of its central committee, and has served on numerous committees during previous years. He is a member of the editorial board of *Circulation,* official journal of the American Heart Association.

Before becoming director of the Heart Institute, Dr. Watt did his principal work in the field of epidemiology. His studies of the epidemiological aspects of diarrheal diseases, poliomyelitis, and rickettsial diseases won recognition for him in the United States of America and abroad. For several years he was in charge of the National Institute of Allergy and Infectious Diseases field laboratory, located at the Louisiana State University School of Medicine.

A physician member of the Commissioned Corps of the U.S. Public Health Service since 1938, Dr. Watt was director of enteric-disease research at the School of Tropical Medicine in Puerto Rico from 1940 to 1944. For the next three years he worked in Louisiana's charity hospitals on a study of drugs in the treatment of diarrheal diseases. In 1945 he received the Bailey K. Ashford Award of the American Society of Tropical Medicine for his research in tropical medicine. During that year the Chinese Government requested his services in the investigation and control of a serious outbreak of cholera in Chungking. From 1948 to 1952 he was director of the Commission on Enteric Diseases of the Armed Forces Epidemiological Board.

Dr. Watt is a member of Phi Betta Kappa, Delta Omega, and Alpha Kappa Kappa fraternities. His professional affiliations include membership in the American Society of Tropical Medicine, Association of Military Surgeons, American Epidemiological Society, American Association for the Advancement of Science, Society for Experimental Biology and Medicine, and American Heart Association. He is a fellow of the American Medical Association and the American Public Health Association.

He was born at Thomasville, Georgia, and received an A.B. degree from Davidson College, Davidson, North Carolina, in 1931. He began his medical studies at the University of North Carolina, and received the degree of Doctor of Medicine from Johns Hopkins School of Medicine in 1935. The next year he was awarded the Doctor of Public Health degree from the Johns Hopkins School of Hygiene and Public Health. He served later as a resident at Herman Kiefer Hospital, Detroit, Michigan, and entered the Public Health Service in 1938 with an assignment to the National Institutes of Health.

Dr. Watt and his family live in Washington, D.C. Mrs. Watt, who is also a physician, is a member of the pediatrics department of George Washington University Medical School. Dr. and Mrs. Watt have two daughters.

☆ ☆ ☆

Howard A. Rusk, M.D. ("Crippled Today, Useful Tomorrow," page 10), is chairman of the Department of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center; an associate editor of the New York *Times;* and chairman of the Health Resources Advisory Committee of the Selective Service System.

From 1926 to 1942 Dr. Rusk practiced internal medicine in St. Louis, Missouri, where he was an instructor at Washington University School of Medicine and associate chief of staff at St. Luke's Hospital.

During World War II as a colonel in the Air Force he originated and directed the AAF rehabilitation program. He was awarded the Distinguished Service Medal for this work, and is a brigadier general in the United States Air Force Reserve.

An international authority on rehabilitation, Dr. Rusk has studied and assisted in setting up rehabilitation programs in Great Britain and various nations on the Continent, as well as in the Far East—Japan and Korea.

A member of numerous associations connected with rehabilitation work, he is the recipient of many awards, including the 1952 Lasker Award of the American Public Health Association.

Dr. Rusk is a graduate of the University of Missouri. His M.D. degree is from the University of Pennsylvania, and he holds several honorary degrees—an LL.D. from his alma mater in Missouri and a D.Sc. degree from Boston University.

He is consultant in rehabilitation work to the United Nations, New York City Department of Hospitals, and the Veterans Administration.

In addition to his numerous contributions to professional journals and books, encyclopedias and general periodicals, he is coauthor with Eugene J. Taylor of the books *New Hope for the Handicapped* (1949) and *Living With a Disability;* is senior author with 34 colleagues of *Rehabilitation Medicine* (1958).

Dr. and Mrs. Rusk live in Scarsdale, New York.

STANLEY SIMMONS, N.Y.U.—BELLEVUE MEDICAL CENTER

Roy Campanella talks with Dr. Rusk, who has helped him and other handicapped persons make a comeback.

Crippled today

Useful tomorrow

℞ HOWARD A. RUSK, M.D.

and EUGENE J. TAYLOR

Institute of Physical Medicine and Rehabilitation

New York University-Bellevue Medical Center

WHEN the 1958 baseball season opened, one of baseball's greatest stars was missing. Instead of being in his familiar spot behind the plate in the new uniform of a Los Angeles Dodger, Roy Campanella lay in Community Hospital, Glen Cove, Long Island, New York. Campanella was taken to this hospital on January 28, 1958, injured as a result of his automobile's overturning on a slippery road.

Fortunately, Roy Campanella is back in baseball—not as a player, for he remains paralyzed, but as a special coach for the Los Angeles Dodgers.

Roy Campanella's neurological status remains about the same, but he has made tremendous functional progress. He can feed himself, assist in his dressing, type a little, and even write surprisingly well. He whizzes around his Glen Cove home in an electric wheel chair, backing, turning, going between obstacles, traveling anywhere he wants to go. He has

a specially modified chair for outdoor use in which he does his coaching.

It is ironic that many of mankind's great advances develop out of mankind's catastrophes. Rehabilitation of persons like Roy Campanella is an example. Before World War II, the use of the terms *paraplegia* and *quadriplegia* were limited almost entirely to the medical profession. They were words almost totally unfamiliar to the public. In those days, when a person like Roy Campanella broke his neck in an automobile accident or a diving mishap, it almost always meant death. Then such an injury was almost synonymous with death, for because of infection life was cut short. Among the 400 cases of paraplegia in military men of the United States in World War I, more than 90 per cent died the first year.

Fortunately, these infections are now largely controlled with antibiotics. Increased knowledge of biochemistry and the body changes following bed rest has shown that such serious complications as bedsores (decubitus ulcers), kidney infection, and decalcification of the bones can be avoided. This is done by getting patients into the standing position for an hour or two each day. Special easily operated tilt tables have been developed for this purpose.

In World War II there were 2,500 cases of paraplegia among the military men of the United States. With modern medical and surgical management, these men did not die. Although they were left with severe disabilities, their minds were alert and their hands retained good function. Most faced life with a strong desire to live it as fully as possible.

What happened to those men is shown in a study of the Veterans Administration entitled *Occupations of Paraplegic Veterans of World War II and Korea,* published in 1957.

The study did not attempt to ascertain what percentage of our total veteran paraplegic population is employed. Its purpose was to secure detailed information as to the jobs held by paraplegics, so that this information could be used in vocational counseling of other paraplegics.

Among the 480 jobs of 466 paraplegic veterans were a number that were unusual. One paralyzed veteran owns the only hospital in his town. He is not only the hospital's administrator but also its chief surgeon, performing operations from his wheel chair.

An enterprising paralyzed veteran is a playground director, organizing recreational activities for several hundred youngsters. A dedicated paralyzed veteran is a minister, who preaches his sermons from the wheel chair and makes his pastoral calls in his hand-controlled automobile.

The most striking fact revealed by the study is not unusual occupations. It is, rather, the fact that these paralyzed veterans are successfully performing in all kinds of jobs. Of the group, 224 are engaged in professional, technical, and managerial work; 102 in clerical and sales work, 103 in mechanical work, 34 in manual work, and 17 in farming. There are few vocational avenues closed to disabled men—even severely disabled men, provided they have initiative and drive.

Paralleling this publication dealing with paraplegic

STANLEY SIMMONS PHOTOS

Patients exercise to prepare for crutches.

A man operates an electric typewriter with a pencil.

Gilbert Provencher puts on a show of his paintings.

First Aid

MINOR WOUNDS AND SCRATCHES

By EARL H. BREON

Director of First Aid, American National Red Cross

The most important factor to be considered in the care of minor wounds and scratches is that any break in the skin, however small and seemingly insignificant, provides an entryway for harmful germs. Measures must be taken to counteract infection.

Another important consideration is that the danger of tetanus is present with all wounds. Immunization against tetanus should be obtained and maintained in accordance with standard medical practices.

The tendency of the average person to neglect a minor wound or scratch creates the possibility of more damage than might occur from a major wound, because victims generally take care of more severe injuries.

This is the first-aid care that should be taken with all wounds or scratches:

1. Wash hands thoroughly with clean water and soap.

2. Cleanse the injury thoroughly, using clean, running tap water and soap or boiled water cooled to room temperature and soap.

3. Apply a dry sterile dressing or compress over the wound and bandage snugly into place.

4. Keep a close check on the wound. If it becomes red or sore, consult a physician immediately.

Certain types of wounds, even though minor, require special care. In the case of a puncture wound caused by a penetrating object—nail, glass, wire, piece of wood—the first-aider should encourage bleeding by applying to the edges of the wound mild pressure with a sterile cloth. He should then wash and dress the wound as we have described. If the penetrating object remains in the flesh, it should be removed by a physician. A loose dressing can be used to cover the area until medical attention can be secured. ▲

veterans is an intensive study of the rehabilitation costs of 31 civilian paraplegics.

The exact number of paraplegics in our civilian population is not known, but it is estimated to be from 100,000 to 125,000.

The civilian paraplegic study was conducted by Dr. S. Harry Berns and his associates at the New York University-Bellevue Medical Center of 31 paraplegics provided rehabilitation services on referral from the Georgia State Division of Vocational Rehabilitation.

The study shows that a great variety of occupations are open to paraplegics. The most significant aspects of the study deal with the economics of rehabilitation.

Of the group after one year, 42 per cent were engaged in gainful employment; 32 per cent were actively engaged in vocational training, looking toward gainful employment; and 26 per cent were unemployed and economically dependent. This is a marked contrast to the 22 per cent who were employed and the 78 per cent who were unemployed and economically dependent before rehabilitation. Five of the group employed after rehabilitation had been homebound for five years before treatment.

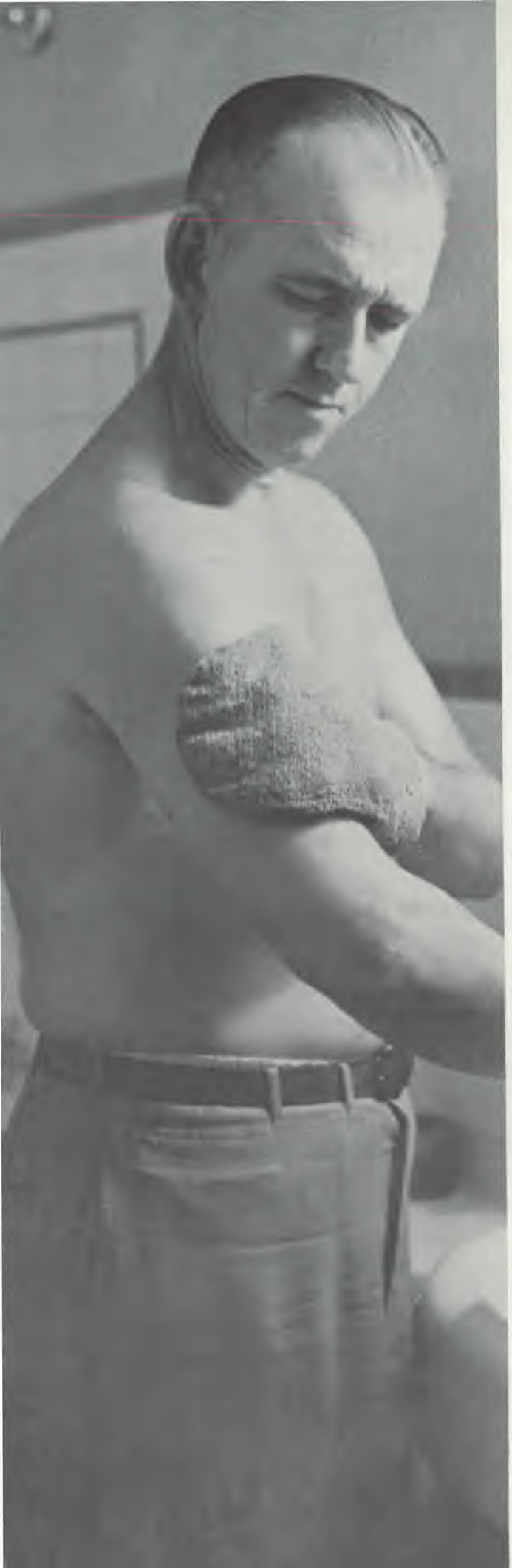
The study brings out forcefully not only medical but economic advantages of early rehabilitation of such patients. Those patients who had urologic, neurological, plastic-surgical, orthopedic, or other complicating problems required an average of 54 days' additional hospitalization for treatment of complications. In addition, their physical rehabilitation programs averaged 30 days longer than those of patients without complications.

The total cost for the uncomplicated patient requiring rehabilitation was $1,794, and the cost for the complicated patient averaged $4,467. These cost figures are for hospitalization and physical-rehabilitation services, and do not include vocational training.

This study is one of a series published by the Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center. In 1957 the Institute also published the first of a series of patient publications entitled *Primer for Paraplegics and Quadriplegics*. This latter publication is designed to give persons affected by these disabilities and their families increased understanding of the condition and practical advice on living with their disabilities.

The results obtained in rehabilitation of paraplegic patients in the United States of America are not limited to the New York University-Bellevue Medical Center. There are numerous other rehabilitation centers here where similar results are being obtained. The Boston Rehabilitation Center of the Liberty Mutual Insurance Company reported that among 86 of a series of 102 spinal-cord-injury cases among workmen in which medical rehabilitation was completed, 37, or 43 per cent, had returned to work or were in business for themselves. Of the remaining cases, 45 had returned to their homes or to convalescent homes and did not require hospital or full-time nursing care. They estimate the savings in indemnity and medical-care costs of these 86 completed cases at $2,719,302.

Nor are these results limited to centers in the United States of America. (*To page 25*)



The tangy tingle of a cold mitten on your skin can do more than a cup of coffee to wake you up and raise your spirits.

A Tonic

FOR YOUR CIRCULATION

J. WAYNE McFARLAND, M.D.

LAST month's article described to you a little of the history of hydrotherapy, or water treatments, and told you that your circulation could be stepped up by the use of cold water. This article will tell you how it can be done.

When springtime comes along, people generally want a tonic. Of course, some people don't enjoy themselves unless they are rubbing, swallowing, swabbing, or smelling some kind of medicine. I am persuaded—having seen all kinds of tonics—that the one we are going to talk about has an edge over many others because it is cheap, easy, and the dosage schedule can be varied to suit almost any person.

This tonic also will be comforting to those who suffer from frequent head colds, cold hands and feet, and poor circulation. They will find something very tangible they can do for themselves.

The blood is the life. If your circulation is not good, it stands to reason that you are more likely to succumb to sickness than the person who has a strong, vigorous circulation.

"But, doctor," you ask, "doesn't our circulation tend to slow down as we grow older? Isn't that a natural thing?"

That is true, but it does not mean that you cannot do something about stalling off poor circulation and its consequences. Why not add some years to your life and some life to your years? It can be done. We know you can improve your health (*To page 31*)

PILLS FOR DIABETES?

WILLIAM W. H. POTE, JR., M.D.

Associate Clinical Professor of Medicine
College of Medical Evangelists, Los Angeles, California

Needles or pills, which or both? This will be the problem facing many diabetics in days to come. Some will be able to enjoy the luxury of pill control of diabetes alone while others will not be so lucky. This article tells you why.

DOCTOR, may I take an insulin pill?" asks many a diabetic patient of his physician. We correct the question. New pills used in the treatment of diabetes mellitus are not insulin pills. The new pills available are either a derivative of sulfa or a biguanide. Because insulin is a protein (like meat), it is digested when taken by mouth, and does not then act as insulin in the body. Insulin must be taken hypodermically by diabetes patients needing it.

"Doctor, may I use one of the new pills for diabetes?" is a good and a pertinent question for all diabetics to ask their own personal physicians. These doctors are the only ones who know the potential usefulness of an oral drug for a given patient.

Insulin was a great discovery, and it has brought life and years to thousands of diabetics. It still has a vital role to play in the management of diabetics in whom the pills will not work or are not sufficient. Even though it is good therapy in conjunction with a planned diet program in the care of all diabetics in whom diet alone is not sufficient, many patients would prefer a little more convenient therapy.

An oral medicine has been sought for many years. Years ago, one particular medicine tested was found to be too toxic. During the war years French investigators discovered that a certain sulfa lowered the blood sugar in animals and humans. In the early 1950's the medicine was tried extensively in Europe. In 1955 careful clinical investigation was begun in the United States of America. At first two sulfas were widely used in investigation. Carbutamide, or BZ 55, was discarded because of its side effects. Tolbutamide, now called Orinase, has been available for three years, and has found wide usage for certain patients. Later Chlorpropamide, or Diabinese, was studied, and it has been available for a year and a half. Like Orinase, it has been found to be useful in certain patients. Most recently, the nonsulfa medicine phenformin was released. It has been used primarily in selected patients.

The extensive clinical investigation and basic research accompanying these discoveries have caused a new interest in diabetes as to its basic metabolic defect as well as treatment. Many discoveries are being made in studies of different animals and human diabetes. Many new compounds are being studied in the laboratory and some in clinical investigation. At least four pharmaceutical companies are actively engaged in research on oral compounds in the treatment of diabetes. Increased knowledge of diabetes is going to assist each patient and the physician of each patient in guiding his care.

What patient can expect to be on oral medicine? And what of the future? The sulfas Orinase and Diabinese are found to be most helpful in patients whose diabetes occurred after the age of forty and in whom the insulin requirement is forty units or less. There are exceptions to this, of course. These sulfas have not been found useful in childhood diabetes and in patients whose diabetes is unstable, and who easily have the extremes of hypoglycemia (low blood sugar) or acidosis. Most patients whose diabetes began before the age of forty will not respond well to these medicines.

EWING GALLOWAY

No patient should consider oral therapy unless his diabetes is well controlled on his present program and he is willing to follow a careful diet before and during the trial of oral medicine. The likelihood of success will be much greater if he achieves control on diet and insulin before change of therapy.

Diabetics already under treatment must consider these points before giving serious thought to a trial of an oral medicine. New diabetic patients must realize that 80 per cent of diabetic patients are obese. Weight reduction will decrease the load on the pancreas and will cause many patients to have marked improvement of their diabetes. Patients willing to accept weight reduction and a careful diet as to amount and timing may not require insulin or need oral therapy. When a patient has had adequate weight reduction or has achieved the maximum amount possible, and his diabetes is still not in good chemical control after he has followed a good quantitative and qualitative diet, oral therapy may add the additional help necessary to achieve ideal control.

Good diabetes control is a point of controversy among patients and some physicians. Good physiological control of diabetes requires that the blood sugars be as near normal as possible without significant spilling of sugar in the urine (that is, no more than 5 per cent or at the most 10 per cent of the carbohydrate intake in twenty-four hours) and that the patient maintain a stable weight, have no symptoms, and have no ketones (acetone) in the urine. Good physiological control is possible in most patients with careful attention to diet and weight reduction, and in necessary instances the addition of insulin or oral therapy.

Because diabetes alone has no painful symptoms and because oral therapy is much more convenient than insulin to some patients, many sacrifice good chemical control for convenience, and encourage their physicians to allow them to spill a certain amount of sugar or to have a higher than desirable blood-sugar level.

If a patient can obtain reasonable chemical control for his diabetes with oral therapy instead of insulin, there is no known objection to this therapy.

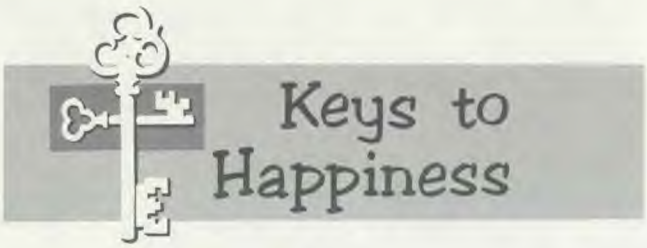
It should be remembered that in oral therapy the long-term effects are not known. What long-term effects will be noticed on diabetes or on complications of diabetes cannot be established yet. No major problem has occurred in three and one-half years in the United States.

Currently it is thought that the mechanism of action of Orinase and Diabinese is probably through insulin from the patient's own pancreas. If this is true, there should probably be no significant difference between the long-term effect of these medicines and the long-term effect of insulin.

Phenformin, known as DBI, is not a sulfa derivative. Its action is different from that of the other two medicines, but it also lowers blood sugar. It appears that its usefulness may be found especially in patients with unstable diabetes, particularly in combination with small amounts of insulin. It has more harmless but annoying side effects than the other two medicines.

Each patient with diabetes should carefully consider why he is seeking oral therapy. If he is doing it as an escape from insulin, he may not be able to escape. If he prefers oral therapy at the sacrifice of good chemical control, this is not wise treament. But if he accepts total treatment of his diabetes—recognizes the continued need of a careful diet program, uses oral therapy as an adjunct, and follows his program carefully—and maintains good chemical control —oral therapy can be of aid and convenience.

No patient is in a position to decide whether oral therapy is best for him. This decision must be made by his physician after review of past control of his diabetes, the several factors in maintaining control, and the likelihood of success. If you wish (*To page 21*)



THE LURE OF LAZY LEISURE

By HARRY MOYLE TIPPETT

Lazy leisure is the goal of millions who hate their work. Try to point out to them the joy of labor, and they look at you as though you had flipped. To think that work could be anything but drudgery is for the birds—to use their own vernacular. Happiness is the ultimate lure for the toilers of the world, but many do not associate it with any activity having to do with their livelihood.

My father worked a 72-hour week as a boy in the tin mines of Cornwall. His recreations were necessarily simple. His mine clothes had to be washed Saturday night so that he could attend Sunday school next morning, the one bright spot of his week. He was disciplined to industry, so that all his life he abhorred idleness. He was so inured to poverty that even in his later plushier days he never ceased to find pleasure in eating the heel of a loaf of bread. Yet I remember him as a cheerful man.

A writer in a popular monthly makes a comprehensive analysis of why people don't enjoy their ever-increasing free time. The five-day workweek with the long weekend has not brought the contentment it promised to those who toil for a living in office, shop, and factory. Restlessness among the laboring classes is increasing, and the cry is for a thirty-hour week and still more leisure, though most people are bored with their free time.

If it is true as reported in a recent city survey that teen-agers are overwhelmingly bored with too much free time, it may be a factor in our alarming increase of juvenile crime. Dr. Boris Pregel, president of the New York Academy of Sciences, has predicted a 20-hour workweek when automatic devices and the utility of atomic energy come into full sway. When this happens, he says, "the poverty-stricken will be replaced by the leisure-stricken." The chief fear of old age used to be poverty. With increasing numbers of senior citizens secure under Federal subsidies, fear of idleness and its consequent uselessness fills their anticipated cup of happiness with gall.

To take up the slack in their free time, millions of people are engaging in activities for which they have no enthusiasm. Many come back from the golf links hating themselves for their poor score or bored because they have no decent competition. Some spend endless hours fishing where the fish aren't biting and come back with empty creels and a sense of aimlessness. Others shoot their allotted deer on the first or second day of hunting and spend the rest of their camping days shooting coffee cans off tree stumps, waiting for their partners to get their kill. Even those who enjoy the great outdoors agree that it's good to get back to work and its routines. To enjoy both work and recreation is normal.

The term "weekend neurotics" has been coined to describe persons with a deep fear of relaxation. It is this fear that keeps many people from taking annual vacations. They don't know what to do with them. Irritability shows at its spiteful worst in persons who have long weekends for which they have no useful assignment. Their five days of diligence is spoiled by their two days of dawdling.

It all simmers down to a growing imbalance of work and recreation. God set the formula for a proper activity rhythm when He said, "Six days shalt thou labour, and do all thy work." The seventh day He assigned to rest, contemplation, and worship. The old-fashioned families of yesteryear who toiled consistently all week long and were found in their church pews faithfully singing their songs of hope and praise on the rest day were happy. Longfellow and Whittier described such idyllic groups, but the discontent, frustration, and anxiety neuroses of so many families today have given rise to a new unpleasant vogue in poetry. Life unrelated to any moral or spiritual standard becomes bleak, meaningless, and wretched, and our rhymers make the most of it. The beatnik generation and its bizarre forms of irresponsibility are the ultimate in aimlessness in a world that recognizes no absolutes.

One of life's absolutes is that no man liveth unto himself. Each of us has some social responsibility. When we consciously or unconsciously evade it by consuming our time and talents on ourselves without regard to what we might be stealing from others in unique forms of service, we are sowing for a harvest of discontent and futility.

Free time is an asset for great accomplishment. If we use it to improve our talents, it should be to some creative purpose that will serve those about us, not merely to fulfill some personal indulgence. Many people sick at heart and ill in body have found health, happiness, and release from all their mental and spiritual shackles by devoting their thought and care and energy to the needs of people less fortunate, of whom the world ever has an abundance. Those who have never tried it don't know what real fun and creative leisure mean. ▲

Delayed Speech in Children

PART II

By W. FLETCHER TARR, Ph.D.

Director of Speech Department
La Sierra College, Arlington, California

Delayed speech in kiddies can be stimulated by speech therapy, but parents must be aware of such factors as illness, shock, stress, speaking two languages, as causes of slow speech.

MANY a little child has been called stubborn or thick-headed because he wouldn't repeat words spoken to him. Most likely he couldn't. If he cannot say a two-syllable word or a simple set of sounds a minute or two after he has been taught them, he may be neither stubborn nor lacking in intelligence. He may be altogether normal in every way except for what is called poor auditory memory span. In other words, he lacks the specific ability to remember a sequence of sounds, especially words of more than two syllables.

If a child who has this difficulty is scolded, called stupid, or coaxed too much, he will almost certainly develop a negative attitude toward speech. If he is punished for his supposed stubbornness, this negativism may reach even farther into his personality, and retardation of speech could become only a minor aspect of confusion in the total learning process.

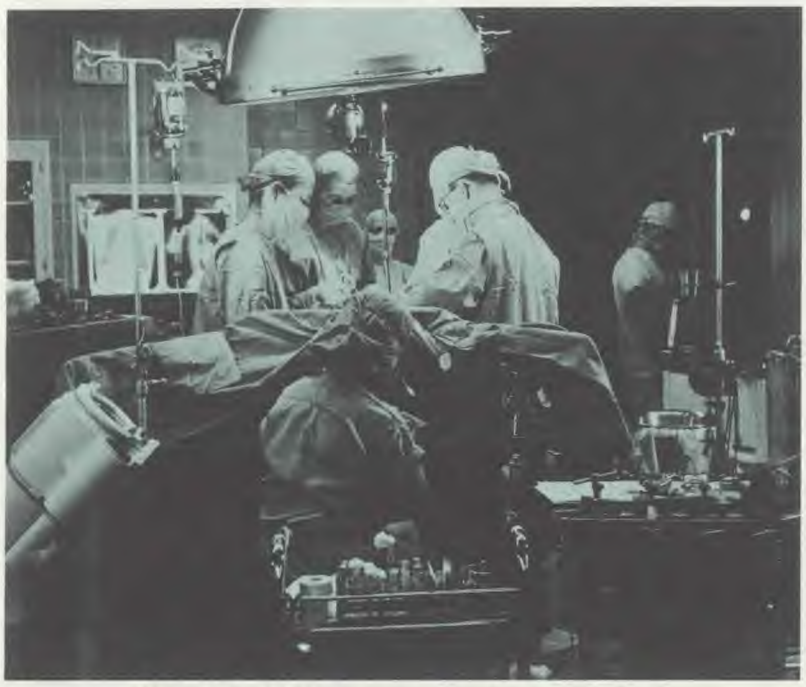
By the time a child has reached two years of age he can usually repeat several sounds one after the other or short sentences. It makes little difference whether the sounds make sense.

However, if he cannot do so by three years of age, it would be advisable for his parents to consult a pediatrician or family physician for qualified speech therapy. The speech therapist will likely be able to prescribe exercises that will largely overcome the handicap of the poor memory span and help the child to achieve good speech. Because of complications that may result, it is generally unwise for parents to attempt speech training in such a case even if they are able to diagnose the trouble accurately. Such training had better be done by a person who understands how to cope with any possible reaction.

Another cause of delayed speech is bilingualism in the home. Some parents who speak a foreign language insist that their children speak English. Normally the child learns the language of his parents, and speaks it until he goes to school. There he makes the change from foreign to English speech or he keeps both. *(To page 23)*

A. DEVANEY

Aerial view of the seven National Institutes of Health.



National Heart Institute surgeons operate on an open heart.

THE NATIONAL HEART INSTITUTE

NATIONAL INSTITUTES OF HEALTH PHOTOS

JAMES WATT M.D.

Director

WHEN I tell people where I work, I am sometimes asked, "What is the National Heart Institute?" This question is not so simple as it seems. The Heart Institute is a lot of things to a lot of people.

To the residents of Bethesda, Maryland, a suburb of Washington, D.C., it is part of a community landmark: the U.S. Public Health Service medical research center, which is known as the National Institutes of Health.

To a professor of physiology in a leading university medical school, it may be the resource enabling him to conduct research that he hopes will shed some new light on the problem of heart disease caused by hardening of the arteries. It may also be the deciding factor in adding some of his star students to the nation's reservoir of medical-research manpower.

To a public health nurse working in a small community, the Heart Institute may be an indispensable partner in her State's program of service to victims of heart and blood vessel disease. The impetus behind much of the help she brings to these people may have come through her State health department from one of the programs involving the National Heart Institute. To a little boy from California (let's call him Johnny) who came to the Institute not long ago for surgery on one of his heart valves, it is "a place where they have a lot of doctors to make you well and a lot of laboratories to study what's wrong with you so they can help other sick people."

Largest of the Heart Institute's programs is the one directly concerning our physiology professor and his students. Through this program the Institute has, in the ten and one-half years of its existence, helped to recruit and train an army of scientifically talented men and women in universities, hospitals, medical schools, and other institutions in almost every State in the Union. Through this program the Heart Institute has played a large part in raising the tempo and volume of heart and blood vessel research and training in the United States from the modest proportions of the year 1948 to the highly productive level we see in 1960.

The grant program has been a fundamental part of a plan that had its beginning in the minds of a small group of men in Congress, medicine, and public health. It was 1948; the memory of World War II was still fresh, and no one was in doubt about the ability of the nation to deal with its problems, however big. A new attitude toward heart disease had been developing: It was not "one of the inevitable penalties of living," and, like other disease-killers that had yielded before the advance of medicine in this century, it could be conquered.

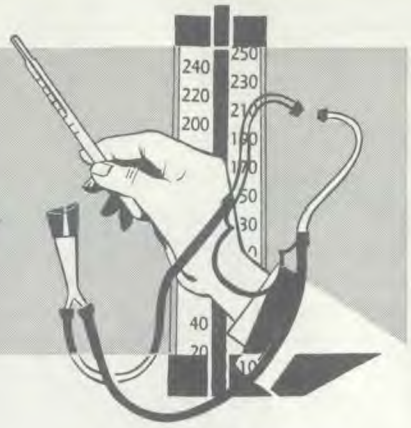
But the planners were faced with an enormous problem: lack of fundamental knowledge of the physiological processes underlying the major forms of heart disease. Curative or preventive measures could not be planned until more could be learned about causes. Before we could learn more about causes, whole new branches of science had to be opened up or old ones greatly enlarged.

The situation called for mobilization of all available resources in the country. It involved manpower and facilities—and a vast expansion of both. It was with conviction of the need to act that the members of the 80th Congress unanimously approved the National Heart Act, establishing the Institute and directing it among other things to "assist and foster" heart and blood vessel research, and "provide training in matters relating to heart diseases. . . ."

Today, through grant support, the Institute is aiding about 1,500 heart and blood vessel research projects throughout the United States. Nearly 700 people in schools from Maine to California are receiving financial support for cardiovascular (heart and blood vessel) study through the Institute's training and fellowship programs. In the United States and its possessions 102 institutions are receiving grants for improvement of cardiovascular teaching.

Of the many administrative ideas that have helped to make the grant program effective, one of the most important is dual review. It provides first for detailed technical scrutiny of grant applications by panels of experts in the appropriate fields, and second for general review by a body known as the National Advisory Heart Council. A fifteen-member group of persons outstanding in medicine, science, education, and public affairs, this council meets three times a year at Bethesda to go over the (*To page 32*)

The Family Physician



We do not diagnose or treat disease by mail, but answer general health questions. Enclose stamped, addressed envelope. Address: Family Physician, LIFE & HEALTH, Washington 12, D.C.

Vegetarianism for Hardened Arteries?

I have hardening of the arteries quite badly and am on a strictly vegetarian diet, with nonfat milk and dry cheese. I avoid flesh foods, for I do not want to take anything with cholesterol in it.

If hardening of the arteries has been brought about through a long period and the condition is already established, there is a question as to how much you can change the process by restricting the use of cholesterol being deposited day by day, but whether you can reverse the process and remove from the arteries the cholesterol that has already been deposited is very strongly to be doubted.

Just one comment in passing regarding the use of cholesterol: It is possible for a person to live on an essentially fatless diet, or at least one in which there is no animal fat, and yet have the cholesterol content relatively high in the blood stream. The human body is capable of developing cholesterol out of nonfat food products. Cholesterol is an essential in normal body metabolism, we believe. It is only when an abnormal amount of it is present that it becomes a troublemaker.

☆ ☆ ☆

Mineral Oil a Thief

I have taken four tablespoons of mineral oil at bedtime every night for five years to make elimination possible. I read recently that mineral oil, even in salad dressings, is a thief, stealing from the body the valuable vitamins that dissolve in fat. Must I stop using mineral oil as a laxative?

It is quite generally agreed among medical workers that the continued free use of mineral oil may detract from the body a supply of vitamin A. We think the use of such a preparation for a short time may not be injurious, but its continued use through the years perhaps is not best. Mineral oil in salad dressings would be regarded in much the same way. In limited quantities or on infrequent occasions the dangers may not develop.

Perhaps you could assist your bowels to move by using small oil enemas at night rather than taking oil by mouth. This often leads to the establishment of a natural movement of the bowels, ending the dependence upon daily doses of cathartic.

☆ ☆ ☆

Eye Floaters

What are floaters? I have them in my eyes. Can they do any damage, is there any remedy or relief from them, what causes them?

Floaters in the eyes are small opacities that follow no definite course. They are particles of slightly increased density that float in the watery humor of the eye.

They may be present for some time or may show for a few days and disappear. It is not understood just what starts them. There is no method of eliminating them. In most instances they either disappear or the person becomes so accustomed to them that they do not interfere with his vision. For some reason they are more noticeable at some times than at others.

☆ ☆ ☆

Sports in Pregnancy

No athletic event, even skiing and horseback riding, is forbidden to expectant mothers who are patients of Dr. Alan F. Guttmacher, director of Obstetrics at Mount Sinai Hospital, New York City. So long as there are no complications his patients are encouraged to continue their jobs and to go out socially.

Dr. Guttmacher's views were discussed recently in an editorial in the *Journal of the Medical Society of New Jersey*. The doctor believes a woman should be a participant of, not a bystander to the events of her pregnancy, and that her pregnancy can be a rich and memorable experience.

Asked what expectant mothers worry about most, Dr. Guttmacher said, "Fear of death, fear of pain, and fear of having an abnormal child." The doctor has excellent ammunition with which to deal with the fear of death. "Today, we can honestly tell our patients that less than one in 2,000 dies in the process of childbirth."

Regarding pain relief, Dr. Guttmacher says that in the United States there is a great demand for pain relief. "The American woman wants it, she demands it, and she gets it."

With regard to the fear of bearing an abnormal child, the obstetrician believes in putting the facts squarely before the patient and assuring her that the odds are "gigantically" in favor of her having a normal baby.

WHITE HARVEST

By HARRY SILBAUGH

Our lawn is blanketed in ermine
Fit for the choicest of kings.
Myriads of snowflakes falling
Are beautiful, airborne things.
Softly, like footfalls of a kitten,
They mantle the tree and the vine,
Till like cake with a frosty coating
Stands a world in wondrous design.

PILLS FOR DIABETES

(From page 15)

to consider oral therapy, it would be wise for you to discuss this frankly with your doctor and work out a plan with him, if it is suitable for you.

Oral therapy has stimulated much research in diabetes. This research cannot be pursued without the cooperation of diabetic patients willing to be a part of clinical study of newer methods of treatment. In addition to patients willing to cooperate carefully in clinical study it is necessary to have the support of patients, their friends, and their relatives—morally and financially—if the great remaining problems of diabetes are to be solved.

If you wish to become part of the vast army of men and women dedicated to the solution of the diabetic problem, call the Diabetes Association in your neighborhood. If there is no such group in your community, call your Medical Association. Or if you prefer, make your interest known to the American Diabetes Association, 1 East 45th Street, New York 17, New York.

Urge your friends and relatives to find out whether they have early diabetes, so that they can have early treatment and prevent the problems and complications of this great imitator and deceiver—diabetes mellitus. ▲

☆ ☆ ☆

Alcohol's Heavy Toll

The Federal Bureau of Investigation reports that 59 per cent of the arrests across the nation are due to drunkenness and liquor-law violation. The *California State Assemblymen* reports that "600,000 alcoholics are costing the State of California $300 million a year, but the State received only $20,893,492 in total taxes on alcoholic beverages for the year ending June 30, 1955."

Many accidents are directly or indirectly attributable to alcohol. More than 20,000 people are killed each year because of liquor-induced accidents. And the habit of alcohol drinking eventually leads to chronic alcoholism, for it is stated that one out of every nine adults or teen-agers who drink will become an alcoholic or a problem drinker.

Americans in 1955 spent more for alcoholic beverages than for all types of education:

Education—$7.5 million

Liquor—$10 billion

The Los Angeles County Court records show that three out of every four applications for divorce or separate maintenance during 1955 resulted from a liquor problem.

Your Child's Health

By ROBERT F. CHINNOCK, M.D.

Professor of Pediatrics, College of Medical Evangelists, School of Medicine, Los Angeles

Constipation. In America today there is much discussion about the maintenance of a normal pattern of elimination and the harm that can result when abnormalities develop. With a proper knowledge of what to expect in everyday living, any change in the habits of elimination will be understood. The word *constipation* refers to the consistency of the stool and not to the frequency of bowel movements. Many normal infants and children do not have a daily bowel movement, but it is only when the stool is hard and difficult to pass that constipation becomes a problem.

The most common factor causing hard stools in children is a diet deficient in bulky foods. Too great a quantity of concentrated or refined foods, such as bread, cereals, potatoes, and desserts, and too few salads, vegetables, and fruits may cause constipation.

Breast-fed babies may have stools at infrequent intervals. This is normal, and even though the bowel movement may be only once a week, if the consistency is normal, there is no cause for concern. Usually breast-fed babies have more frequent stools than bottle-fed babies.

Occasionally, a small fissure in the lower bowel may cause constipation because of the pain and spasm associated with passing the stool. Follow the advice of your physician, should this be the case. There may also be a narrowing of the bowel outlet, or the muscles may not be strong enough to expel the stool. This requires careful supervision by the family physician.

If a child has been punished at the time of a bowel movement, or if there has been pain associated with bowel movements in the past, he may be afraid to pass the stool. This retention leads to a hard stool. Reassure the fearful child. Give him a wholesome diet and avoid the use of laxatives.

Laxatives should not be given unless specifically recommended by a physican. If the diet is right, laxatives are unnecessary. Laxatives used over a long period of time may cause harm. When a child has been given frequent enemas and not allowed to develop normal habits, prolonged constipation may result.

A child who receives a well-balanced diet will rarely be constipated. If a tendency toward constipation is noticed, an increase in fruit and vegetable intake will usually correct the trouble. Give the body an opportunity to function properly. It will if you let it.

BABY SITTER'S HOLDOUT

By REVAH SUMMERSGILL

Who's that peeping round the door
Trailing his night baby on the floor,
Looking tousled and hopeful and wise,
With his flannel sleepers and teary eyes?
Why, the same young fellow I've seen before
A dozen times tonight, or more;
The one I read to, then tucked in neatly,
The one who said his prayers so sweetly.
The one I took to the toilet and kissed,
Brought drinks of water to, scarcely missed
Before he needed a blanket on,
Or the hall light left, or his doll was gone,
Or he felt very hungry, or found a finger
Should have a band-aid. How you linger,
Holding out till the very last minute
Against that bed and sleeping in it.
Any second now I'll get in.
Off with you, Baby, and stow that grin.
Grandma's beginning to see the light
About mother's words, "Be firm at night."

School Lunches

To assure good health for children, special attention should be paid to the school lunch. If good nutrition is attained, children's diets, the same as those for grownups, must include milk, butter, fruit, vegetables, whole grain, and enriched cereals in proper quantities.

Inadequate lunches can deprive children of the nutrition necessary for good health and intelligent work at school. A sandwich and a soft drink are not sufficient, even though the child may have a good breakfast and evening meal.

A child's lunch should provide at least one third of the daily food requirement. Whether eaten at home or at school, it should include:

1. One-half pint of milk.
2. A substantial protein food, such as egg, cheese, or a peanut butter sandwich.
3. Vegetables or fruit.
4. Whole-grain or enriched bread with butter or margarine.

Although some hot food is desirable, well-planned cold lunches can be both appetizing and nutritious.

Adequate lunches eaten in pleasant surroundings will contribute much to a child's emotional health as well as to good nutrition.

In addition to being nutritious and palatable, school lunches should be safe. The consumption of food from unsafe sources or prepared under unsanitary conditions may, and often does, result in serious illness.

Not only should milk used in schools be pasteurized but it should come from sources approved by the health department. If pasteurized milk is not available, schools should rely on dried or evaporated milk. Attention should be paid to the selection of wholesome vegetables and other foods. It is also important that perishable foods prepared and stored in school kitchens be properly refrigerated.

DELAYED SPEECH

(From page 17)

If two languages are spoken at home, harm can very easily result. In an immigrant family of my acquaintance, the parents wanted to give the children as rich a background of language as their own. Three days a week they spoke Hungarian, two days English, two days German.

The three children in the family all had speech impediments. The oldest, a girl aged eight, had a severe stutter; the two boys, aged six and four, were seriously retarded in speech. We noticed a distinct improvement in all three a month after the parents were counseled to speak only one language with the children. Within a year the two younger children showed almost no discernible difficulty in speaking.

Bilingualism does not always cause speech difficulties, but when two languages are spoken simultaneously when

the children are going through the difficult stage of speech learning there is grave danger of interfering with its normal development.

One theory that many people accept is that changing from left-handedness to right-handedness may cause speech defects. There is some physiological basis for this theory. The portion of the brain that controls speech also determines handedness. There is no proof that every case of shifting from left to right has caused a speech impediment. Because speech and handedness develop simultaneously and because of the interplay between the two, it is wise for parents and teachers to allow the child to develop skills in the hand he shows preference for.

If he does not show a preference, it is wise to consult a psychological or speech clinic. Most of these clinics have the necessary equipment for finding which is the naturally preferred hand. When the child appears to be really late in speech development, he should by all means be taken to such a clinic.

A cause of speechlessness that is quite frequent is emotional shock or serious accident. Many children who have learned to talk have lost the ability as the result of a fright. Often the speechlessness will persist for years.

A girl of eight was brought to us who had been knocked down by an automobile six months before, and she had not spoken since. Medical tests showed no physiological damage. After seven weeks of psychotherapy, during which the shock of the accident was reduced, she began to talk again. Cases of this kind are best handled by a skilled clinician, preferably one whom the child has not known before. It is generally useless for the family to try to cure this type of difficulty, even if they know how.

An equally common cause for loss of speech is disturbance of the emotions. This may result from neglect by parents, violent disagreement in the home, loss of one or both parents by death or divorce, or even too much competition for communication at home. One girl we treated did not learn to speak until the second grade in school because she was the middle child of eleven at home. It required much love and months of patient attention to bring about a situation in which she could begin communication.

Forcing children to recite in public when they feel inferior to the task, overtaxing them by having them memorize and repeat poems or memory verses when they show inability or resentment, punishing them when they make mistakes in their speech—these and other similar tactics are often responsible for loss of ability to speak. Most often the services of a child psychologist and speech pathologist are necessary to undo the damage.

Too often we take children's speech for granted. Just because they acquire what we consider a skill equivalent to ours, we assume that they are on an equal basis with us in the use of that skill. We are inclined to forget that speech is an acquired and not a hereditary characteristic. We overtax the newly acquired ability.

A young father asked us recently why his four-year-old son had begun to stutter. Upon questioning him we found that he had been teaching the little fellow to repeat the multiplication tables—up to "five times twelve is sixty"—from memory. For the sake of showing him off before the neighbors and satisfying his own ego, he placed in jeopardy the most valuable faculty his little boy possessed—the ability to communicate.

It is amazing how tough little children can be and how much punishment the speech mechanism will take, yet in the young child it is an extremely delicate, complicated instrument. If we overload it or tax it beyond the limits of its endurance ever so little, it will crack. And no one knows what those limits are for each individual. ▲

The Golden Age

This page is dedicated to all our Golden Age readers who are still young at heart. It is designed to improve and encourage active hobbies, good diet, and outdoor exercise.

By OWEN S. PARRETT, M.D.

TRAILERS

MY WIFE wants to buy a trailer. For about a year when out driving we have found it hard to get past a trailer sales park without stopping to make a thorough inspection of the various types and models. At county fairs we hurry along until we reach the trailers.

High taxes, high cost of building, and high rentals have contributed to make trailer life popular with many. As couples get older and the home nest is emptied of the children, there are only mother and dad left to consider and provide for. The wife and mother, somewhat worn from raising a family, looks forward to cutting down on housekeeping routine. A trailer lends itself to lighter housekeeping. I always ask the people living in trailers whether they are easier to take care of than the home they left, and the answer is usually that they are much easier to keep up.

Another question I usually ask is "Are you happy and satisfied with trailer life?" Almost always the answer is that they like it.

Recently I called on a sick man living in a trailer. I asked him how long he had lived in a trailer. He had retired three years before and had lived in the trailer since that time. As I turned to leave, he asked whether I would like to have his business card. It read, "Mr. Blank, retired, no phone, no address, no business, no money." Turning it over, I read on the back: "Unhurried, unworried, unemployed, and unessential." He looked the part. Perhaps some of the people with high blood pressure might go into business with Mr. Blank.

People living in trailers, having been freed from much housekeeping and yard work, have time to be sociable and friendly. If the people living next door happen to be otherwise, all you need to do is hook your car on your trailer and move to a more favorable location.

The trailer we are almost sure to buy will be our third one. After buying a trailer we always found that we did not have time to get away. I will take the blame for that. We are going to try it again, and with a little careful planning we hope to spend a few quiet weekends out in God's great outdoors.

Once when we were visiting a professor of biology I noticed a spider running along the edge of the rug. I called attention to it, expecting him to jump up and kill it. He did not mind its presence, thinking perhaps that spiders help control some of the insects that otherwise might overwhelm us. I am sure this friend gets a lot more out of the world about him than most of us, and a trip taken with him would yield much information on nature's secrets. The more we know about nature, the more our interest grows. I have painted a few oils, and I see more in a sunset than I used to. As we work with bees, these little insects with their different markings are of much more interest to us. Every orchid I see worn makes me take a second look for its individual markings. If a trailer can offer us a better chance to get out and learn about the world, it should pay good dividends.

In considering a trailer, carefully ponder its main use. A trailer can be either too big or too small. For a permanent home, the big trailers provide space for most of the comforts and all the necessities of life. Many people I meet have sold small trailers and moved into big ones, and like them much better. If a trailer is wanted for weekend trips or only part of a season, one measuring sixteen to twenty feet would serve nicely.

If you are going to take to the long, long trail, a size of only twelve to fourteen feet or even smaller is a handier size with which to cross the country. It drags less on the hills and moves easily in traffic.

The great house trailers are best moved by professionals with trucks bonded for your protection, whose charges are not out of reason, considering that moving is a rather infrequent affair.

Now you are ready to buy the trailer. Where will you keep it when not in use? My secretary lives out in the country and has kindly offered me parking space at her country home for our trailer-to-be, for we have no room on our lot. If a trailer can be parked near home, it might be used on occasion for overflow guests.

There is a type of trailerlike vehicle in which a top fits onto a pickup truck with a long bed. Some people prefer these as more maneuverable, though they do not provide quite so much space. The cost would not be too different if you used a secondhand pickup and got a new top with all the built-in features for camping.

A trailer that looks like an aluminum box and can be expanded into a tentlike room with metal frame is very compact when folded up. Its cost is low.

Perhaps you are not one of those with enough gypsy blood in your veins to care for trailer life, but you never can tell when the trailer bug may bite you and cause you to join the procession of trailer enthusiasts. ▲

CRIPPLED TODAY

(From page 12)

Similar results have been reported by the National Spinal Injuries Center, Stoke-Mandeville, Great Britain; the center of the Rehabilitation Society for Cripples, Montreal, Canada; the Tobelbad Rehabilitation Center, Graz, Austria; and other centers throughout the world that offer complete and integrated programs provided by trained personnel.

Because the disability of quadriplegia is even greater than of paraplegia, the rehabilitation of the quadriplegic is much more difficult and the potentials of most quadriplegic patients more limited. Heavy reliance must be placed on self-help devices, developed to promote self-sufficiency in the rehabilitation of the quadriplegic. For the past nine years the New York University-Bellevue Medical Center, with the aid of a March of Dimes grant from the National Foundation for Infantile Paralysis, has operated a testing and information center on such devices. Devices developed in other centers are sent to New York for evaluation and testing, and the results are distributed throughout the world.

Among such devices are those to assist quadriplegic patients in eating, personal hygiene, writing, typing, and use of the telephone.

The National Foundation has been a leader in the development of self-help devices, for quadriplegia is a frequent result of paralytic poliomyelitis.

In an analysis of 64,146 cases of paralytic polio, 17.4 per cent were found to have severe paralysis of at least both arms and legs.

One of the most promising of recent developments in devices for quadriplegic patients is a mechanical muscle, demonstrated in early 1958 at a conference on human disability held under the auspices of the New York Academy of Science. The mechanical muscle, powered by carbon dioxide gas, is still highly experimental. It is actually a brace plus a special plastic material that contracts in a manner similar to a muscle's contraction.

It was developed by Dr. Joseph Laws McKibben, an atomic physicist at Los Alamos, whose daughter is a patient at the Rancho Los Amigos Respiratory Center in Los Angeles. The daughter, now 14, was paralyzed from the neck down by polio in 1952.

As a result of modern medical management and these self-help devices, there are numerous examples of determined quadriplegics who lead busy and productive lives.

One of the leading cotton brokers of the South became a quadriplegic eight years ago as the result of an automobile accident. In addition to operating a complex and highly successful business twelve hours a day, he participates in many other activities, including deer hunting. Each year he bags his quota.

In New York City a woman physician broke her neck in a fall five years ago. The result was complete paralysis from the upper chest down and partial paralysis of the arms. This physician drives her own car, leads a busy social life, and continues active practice of psychiatry.

A lawyer almost totally paralyzed in both arms and legs for the past eleven years conducts an active law practice from his apartment on New York's East Side. Each year he travels in his wheel chair on extended business trips, and since becoming paralyzed, he was admitted to practice before the Supreme Court of the United States.

One of the faculty members at Rollins College, Winter Park, Florida, transferred to the college eight years ago as a quadriplegic student after breaking his neck in the first play of the first game of the football season. Up until then he had been considered more as a football player than a scholar, but at Rollins he earned election to Phi Beta Kappa and now operates the college radio station.

These are only a few of hundreds of such courageous people. Modern medical management and self-help devices, coupled with personal courage and determination, provided the ingredients for their rehabilitation. Roy Campanella has demonstrated his fighting spirit and great courage on both the baseball diamond and in the Institute of Physical Medicine and Rehabilitation. These qualities made his rehabilitation possible, and they are his most important assets as he travels the path of life in his wheel chair. ▲

REDECORATING

By G. CLARENCE HOSKIN

The furnishings for many years were placed
Where they were most befitting to be seen,
And though they were impoverished and lean,
With threadbare tapestries, so long outfaced

By the more modernistic that replaced
The ancient hand-me-downs of faded sheen,
They still possess the dignities serene
That steadfastly refuse to be debased.

With style the overstuffed must be renewed,
And spindled chairs slip-covered to provide
A pleasing newness to the dated old

That still retain the charm we cannot hide,
The cherished individuality
That we evaluate with fitting pride.

Home Nursing

By MARY CATHERINE NOBLE, R.N., R.P.T.

SOME BASIC CONCEPTS

YOU should maintain proper support of the legs, but this does not necessarily mean that the feet must be straight out in front of the body. Generally speaking, it is best to maintain a normal sitting position—not half-lying, half-sitting. The half-lying, half-sitting position places unnecessary strain on muscles and ligaments. It causes the patient to tire quickly.

Getting the convalescent into a chair can often present a major problem unless we remember our first principle—seeing, and thinking about what we see.

Many a very weak person can help himself a little and the nurse a great deal if he has confidence in her. Explain in simple terms, step by step, what you are going to do. In order to do this, you will have to think through what you are going to do. Pretend that you are the patient for a few moments to decide that what you plan to do is reasonable for him to perform.

Have everything ready before you begin to tackle the problem together, and try to keep in mind that it is a cooperative effort, the two of you working for a common goal.

In our patient with a stroke, one arm and one leg may be more or less useless, but he still has one fairly good arm and leg. Devise a way whereby he can use his good arm and leg in helping you get him up on the side of the bed.

There are many different ways of helping people help themselves, and you will be able to think of the ones you need, once you accept the idea that they can and should help themselves.

Once the patient is sitting on the side of the bed, stand directly in front of him. Stoop down, knees bent, so that your knees are in front of his knees. Ask him to lean forward so that his head is in line with his feet instead of several inches behind them, as is normal in the sitting position. This change will shift his body weight forward and help with the big push into the upright position. Have him place his good hand on your shoulder. Your hands should be on his hips, and as he begins to attempt the standing position your hands should slip quickly behind his hips. With your knees in front of his knees and your hands behind his hips, he will find it easier to keep from buckling and sitting down again.

If the chair is by the bedside, a pivot on the good foot will place the patient in the right position for sitting. To seat him, simply reverse the standing procedure. If you have chosen a comfortable chair with arms and of the same height as a straight chair, you will have little difficulty in getting your patient into the standing position to pivot again and get back into bed when he is ready. Thinking through the procedure will help you choose the side of the bed that will be easier for the patient to get into and out of. Which side is chosen depends on which side the patient's disability is on. From one side he can more easily pivot on his right foot, and from the other side he can more easily pivot on his left foot. Try it yourself and see.

Beginning steps for walking may be taken in the position of nurse-facing-patient, hands behind his hips, his hand on her shoulder. As soon as you can, get behind him and walk behind him, supporting him at first, if necessary holding him up by a wide strap around his waist or by the belt of his trousers. You can support him better from behind him, and his pathway is free from obstructions. This is also the best place to walk to help a patient who is learning to use a cane or crutches, for you can catch him with your arms around his waist if he begins to fall. You cannot do this if you are at his side.

All patients need to be protected against falling, but if a patient should start to fall do not injure yourself trying to maintain him in an upright position. Break his fall, and ease him to the floor. Then *get help* to get him up. Make him as comfortable as possible and *get help*. If you injure yourself in attempting to lift an almost dead weight, there may be two patients instead of one!

Wait until help comes, and do not panic. Talk to him cheerfully and keep up his spirits until you can get him back into bed. Sick people need a great deal

Camouflage

By JEAN CARPENTER MERGARD

He sat like stubborn winter on a hill,
That stays forever camouflaged with snow,
Surveying all beneath him with a chill,
Beglaciered eye. We all had come to know
This was his way; no one expected less
Or more of him (which may have been his reason
For constancy of manner). None could guess
That even winter wearies of its season—
Until a violet child, devoid of awe,
Smiled up at him and caused a sudden thaw.

more reassuring than healthy people do.

Here are your basic principles in caring for patients.

1. Keep alert. Observe. Think about what you see.

2. The human body was created for activity. Keep it moving *within the limits* of the illness or injury.

3. Do not think of the patient as an invalid or let him begin to think of himself as an invalid.

4. Maintain good posture lying, sitting, and standing. Sturdy shoes to wear in standing and walking mean a good basis of support for the body.

5. Think about use of the body after the patient is better. Ask yourself whether the position usually maintained is a position the part can function in once the patient has improved.

6. Put yourself in the patient's place. Think through a new procedure before you start. Hop around on one leg and see how it feels, or try to get out of bed without using one arm or leg and see which side would be easier.

7. Protect the patient from falls, but protect yourself too. Ease him to the floor if he should get off balance and you cannot stop him from falling. Think this procedure through beforehand, so that you don't instinctively try to keep him on his feet. Break his fall, send for help, and WAIT for help to come.

Happy and rewarding nursing! ▲

A NURSING HOME SERVICE

The modern nursing home is a place where those in need of such facilities can be assured of competent nursing care, healthful, adequate diet, and congenial associations. It is a home away from home for loved ones who for various reasons should have nursing home care.

Modern day living with its related problems has created a demand for the nursing home service. But you want to be sure that you are entrusting your loved ones to a home that will make every needed contribution to their health, happiness, and general welfare.

As an aid to those who desire to explore the nursing home facilities in certain areas, we maintain a listing service for our readers and their friends. However, we

list only homes that are properly recognized and of good repute. **For information write: LIFE AND HEALTH, Dept. LH-20, Washington 12, D.C.,** stating areas in which you are interested.

We assume no responsibility other than to provide listing information.

Fun and Health

By DOROTHY WALTER, R.N.

"H" IS FOR HEARTS

SCHOOL had just begun. Miss Wayne was calling the roll.

Pauline raised her hand. "Jim's in the hospital. The doctor says he has rheumatic fever."

"Rheumatic fever?" blurted Roy, Jim's closest friend. "What's that?"

"It causes heart trouble," Pauline replied.

"Heart trouble?" Roy looked frightened. "He isn't going to die, is he?"

"No," Pauline reassured him. "But he has to stay in bed for at least a month."

Dick raised his hand. "Miss Wayne, why wouldn't heart trouble be a good topic for our health club study? I've heard dad say that heart disease kills more people than polio, diphtheria, scarlet fever, and some other diseases all put together."

"Since this is heart month, we couldn't choose a better topic," Miss Wayne said. "Do you suppose your father would give us a talk about it?"

"I'm sure he would," Dick assented. "I'll ask him."

A few mornings later Dr. Bruce came to the health club. Jerry called the meeting to order, then introduced the doctor.

"Dick tells me that you are interested in knowing something about heart disease," the doctor began. "I suppose you know that heart disease isn't just one disease, such as measles. There are several kinds of heart disease, or heart trouble, as most people call it.

"A few babies are born with hearts that are defective and don't work properly. Some people have hearts that have been damaged by high blood pressure or other abnormal physical conditions. Then there is rheumatic heart disease, which results from an attack of rheumatic fever. This type accounts for about 98 per cent of all the heart disease that children and teenagers have. Perhaps you would like to ask some questions about this kind."

Pauline raised her hand. "Is rheumatic fever catching? Jim hadn't been around anybody who had had it, so far as I know."

"No. We don't consider rheumatic fever a contagious disease, such as measles or mumps, but it is possible for the infection that is associated with the beginnings of rheumatic fever to be passed from one person to another."

"What causes it?" Mabel questioned.

"We aren't exactly sure," Dr. Bruce replied, "but records show that almost every case of rheumatic fever follows a streptococcus infection of the upper respiratory tract."

"Streptococcus?" Pete exclaimed. "What is that?"

"A streptococcus is a germ that causes various types of infection. It grows in the form of a chain, like a string of beads. It is the germ that causes what is usually called strep throat."

"A lot of us had strep throats when Jim did," Mary said. "Will we get rheumatic fever too?"

"Most likely not. Many children have streptococcus infections, but only a few of them develop rheumatic fever. Some doctors believe that the disease is caused by an allergy similar to hay fever or hives; that just as in hay fever and hives the body reacts abnormally to certain pollens or foods, so the bodies of certain people develop an abnormal sensitivity to the streptococcus germ that results in rheumatic fever."

"What are the symptoms of rheumatic fever?" Miss Wayne asked.

"Ordinarily one of the first symptoms is a sore throat of the strep type. This may be present as long as three weeks before the onset of the disease. When the fever begins, many symptoms are the same as those of any other infectious disease. One symptom that is quite different is rheumatic involvement of the joints. As the temperature rises, one or more joints will become red, swollen, and very painful. The strange thing about it is that the rheumatism doesn't stay in the same joint, but hops about from one joint to another.

"Besides this acute type of rheumatic fever, there is another type that develops without any severe symptoms. The child begins to lose weight, to lose his appetite, and gets tired too easily. He may have frequent nosebleeds and complain of aches that are often called growing pains."

Roy raised his hand. "Why do you call rheumatic fever a heart disease?"

"Because almost every case damages the heart to some extent. When the infection involves the valves of the heart they become inflamed, and wartlike lumps form on them. When the valves heal they are sometimes so thickened and scarred that the heart can hardly force the blood through them or the scar tissue may hold

NIGHT

By R. H. GRENVILLE

I do not fear the dark,
For what is night?
Only the shell that holds
The pearl of light.

the valves open, so that the heartbeat forces the blood backward. In either case, the heart is overworked."

"How do doctors treat rheumatic fever?" Sam asked. "What can they do for Jim?"

"The care he is probably getting is absolute bed rest, fresh air and sunshine in his room, a good diet with plenty of protein and vitamin C. He may be given aspirin to relieve his fever and pain. Penicillin helps the body fight the infection. Some doctors give cortisone to help the body overcome the effects of the allergy."

"Will Jim need to follow any special routine when he is out of bed?" Miss Wayne asked. "Can we help him here at school?"

"Jim will need to return to his normal activity very gradually. He must not get chilled and take cold or become overtired. You can help him to remember these two things. They are very important. The reason is that rheumatic fever often recurs."

Dr. Bruce glanced at his watch. "I see that my time is up." He turned to the chalk board. "Before I go, I want to write down some things that will help Jim to keep well. They will help all of you to keep from getting rheumatic fever. Watch these points carefully." He wrote:

1. Good nutrition.
2. Exercise out of doors, but avoid too strenuous work or play.
3. Fresh air and sunshine.
4. Plenty of rest and sleep.
5. Avoid taking colds.
6. Build up general health.
7. See your doctor at the first sign of sore throat. ▲

☆ ☆ ☆

Who Are Deaf?

One out of ten Americans suffers some degree of hearing loss. This is more than twice the combined total of sufferers from the four most publicized diseases in the United States—cancer, polio, heart trouble, and tuberculosis. Half of these can be helped to regain their hearing by medical, surgical, or mechanical means, according to the Hearing Aid Industry Conference.

An estimated 8 million have a loss sufficient to require the use of a hearing aid, but half of these refuse to avail themselves of the help. Major reasons for this are false vanity, misconceptions about deafness, and prejudices that date back to the time when modern efficient and inconspicuous hearing aids were not available.

The average person who suffers a correctable hearing loss waits five years before taking action. This period constitutes a major loss to the productive economy of the nation, and could be prevented by prompt action.

A BEDTIME STORY

By CHARLES M. WESNER

ONCE, many years ago it was necessary to warm beds with a bed-warming pan before retiring. This pan had a long handle and cover. It was filled with hot ashes from the fireplace, then passed between the sheets, moving it up and down, and back and forth. Had it been stated then, that you could own a built-in bed warmer and, with a turn of a knob, select any amount of warmth for your bed, it would undoubtedly have been looked upon as gross exaggeration. Yet today such a prospect is no longer an impossibility.

Electrically warmed beds have now become a reality, and those who sleep in them enjoy solid comfort every night.

The Electro-Warmth Co., Dept. 6, 4115 Aspen Street, Washington 15, D.C., will send you a comparison chart of electric bed warmers.

The Electro-Warmth is the modern approach to warming a bed from below the sleeper, thus driving lost body moisture from the bed and eliminating heat depression. It can be delivered for only $24.95, for either double or single bed. After you receive the Electro-Warmth, your bedtime story every night will be real solid comfort, as you smile yourself to sleep.—ADV.

The Dietitian Says

If you have a question or problem regarding food or diet, address: The Dietitian, LIFE & HEALTH, Washington 12, D.C. Enclose stamped, addressed envelope for reply.

By LYDIA M. SONNENBERG

WE DON'T EAT WHAT WE DON'T LIKE

YOU have often heard someone say, "I can't eat that!"

This comment can refer to anything edible, from the most common food to the most rare, from the most simple to the most elegant. Often it is not possible to account for food likes and dislikes by considering the food itself.

Dr. Margaret Mead of the American Museum of Natural History reminds us that food habits are built in from infancy, and may not correspond with good nutrition. It is just as easy to develop a liking for a nutritious, well-balanced diet as for any other. Dr. Mead quotes a psychologist who said, "People don't eat what they like; they like what they eat." This states an important truth.

It is highly desirable to develop in children an experimental and a receptive attitude toward food. They should be encouraged to eat many different kinds of food. Developing a liking for a large variety of foods is one of the fundamental principles of a sound nutritional program.

Longer, Healthier Life

A ten-point do-it-yourself program emphasizing nutrition, which is designed to help the average healthy man or woman live to a ripe old age, was recently suggested by Dr. Bortz, who is a member of the American Medical Association committee on aging.

According to Dr. Bortz, ten basic needs for older people are:

1. A balanced diet including more protein, vitamins, and fluids and less fats and calories.
2. Regular elimination of waste products.
3. Adequate rest of both mind and body.
4. Pursuit of interesting and specific recreational activities.
5. A sense of humor, which is the best antidote for tension.
6. Avoidance of excessive emotional tension, which leads to personal ineffectiveness.
7. Mutual loyalty of friends and family.
8. Pride in a job.
9. Participation in community affairs.
10. Continued expansion of knowledge, wisdom, and experience, which add to maturity.

To this list we should like to add: An abiding faith and trust in a kind, benevolent heavenly Father.

DEEP-SEATED

By ELAINE V. EMANS

The unmistakable woman's touch
That delicately lingers
About a house lies not so much
In her ten dexterous fingers,
Busy with all she has assigned them,
As in her heart behind them.

Tips for the Reducer

You have heard it said that you have to walk five miles to use up the calories in a single piece of cake. Many overweights have developed the attitude "What's the use?" They think exercise isn't worth the effort. Authorities tell us that this attitude is wrong. A committee of the American Medical Association says, "Exercise is one of the important factors contributing to total fitness."

Another authority, Dr. Ancel Keys of the University of Minnesota, says, "Careful studies of the habitual diets of fat people show that in most cases the food intake is not really very large. The trouble is often mainly on the energy expenditure side—too little physical activity to burn up a normal or even a subnormal diet. . . . You will feel better emotionally and physically if you get some exercise than if you try to do the whole reducing job by dietary reduction alone."

Overweight university students studied by Dr. Keys were given a reducing diet of 1,200 calories daily. Some of them were put on a program of walking for two hours a day at three and a half miles an hour on a slight incline. The students who had no special exercise program lost an average of three pounds a week. Those who walked averaged a loss of five pounds a week and improved their fitness at the same time.

Outdoor excercise gives all the benefits of vigorous activity plus the increase in hemoglobin from extra oxygen.

It makes sense to cut down on calories by eating more low-calorie foods—fruits and vegetables—and less fats and sweets, but it is also sensible to increase your activity, not by short and sudden periods of strenuous exercise but by a reasonable increase in activity as fitness improves. ▲

CIRCULATION TONIC

(From page 13)

many times if you will try the tonic we are about to describe.

In introducing this prescription to you, I want to quote from page 276 of *The Ministry of Healing*, one of the finest books obtainable on general health:

"Most persons would benefit from a cool or tepid bath every day, morning or evening. Instead of increasing the liability to take cold, a bath, properly taken, fortifies against cold, because it improves the circulation; the blood is brought to the surface, and a more easy and regular flow is obtained. The mind and the body are alike invigorated."

The bath I am talking about is called a cold mitten friction.

We are going to study circulatory gymnastics. It's easy if you follow directions.

1. Fill the washbasin with tepid or slightly warm water. Be sure you have the room warm in which you are going to take this mitten-friction bath. In most cases this will be the bathroom.

MEAT-FREE RECIPES

If you would like a number of recipes for dishes that do not contain meat, send for the *Life and Health* article reprint of "Meatless Meals," addressing your request to Circulation Department, *Life and Health*, Washington 12, D.C. Be sure to send a self-addressed, stamped envelope and five cents for each copy of the reprint that you wish.

2. From the tepid or slightly warm water wring almost dry a rough washcloth. If you prefer, you can buy a regular friction mitt at a drugstore.

3. Rub briskly the left forearm and arm. Be sure you continue rubbing until the skin is glowing pink.

4. Dry the arm with a warm towel. That is all for your first day's start on a cold mitten friction tonic.

5. The next day rub not only the left arm and forearm but also the right arm and forearm. Get the skin pink. The reaction in the skin to the friction and to the stimulating effect of the water does the trick.

6. The third day you rub both right and left arms and add the chest.

7. On the fourth day you rub both arms, the chest, and add the abdomen.

8. On the fifth day rub arms, chest, trunk, and one leg. On the sixth day you include the other leg.

9. Each morning get the water a little cooler, and soon you'll find you won't even mind ice cubes floating around in the basin. For a more vigorous tonic effect, you can leave a little more water in the friction mitt or washcloth. In other words, don't wring it out quite so dry.

10. Should you have a sensation of chilliness, dry each segment of the body before starting to rub the next. In time you will be able to rub the entire body without stopping in only five minutes.

Here is a word of caution for those who might feel tired after such a brisk rubbing. If you are tired after rubbing one or both arms, don't be alarmed. Perhaps for several mornings you will find it necessary not to include another portion of the body. If need be, lie down and rest a few minutes. But don't give up until you can take friction to the entire body.

In order to include the back you will have to use a small hand towel or have someone help you. We usually save the cold mitten friction for the back until the last. The back, especially between the shoulder blades, is the most sensitive area of the body to cold. If you first rub the other segments of the body you will find that this upper part of the back will stand the cold water much better.

Here is what is happening as you take the cold mitten friction: the blood vessels in the skin are toned up by both the cold and the friction, so that they help the heart in the work of pumping blood. Perhaps you did not know that the blood vessels actually can assist the heart by pushing the blood back through the veins to the heart itself. Furthermore, this same treatment causes many blood vessels to open that probably have not been opened for some time. This results in increased circulation, and the cold feet and hands are not so noticeable as before.

Cold mitten friction increases the resistance of our first line of defense against disease, our skin. A healthy skin can actually destroy disease germs. Because the circulation is increased, the blood stream picks up more of the substances that are made in the skin when sunshine comes in contact with certain fatty elements. These substances are called vitamin D. You are actually gathering up the sunshine into your skin and distributing it around to various vital centers of the body.

You also will be happy about the fact that your resistance to head colds and chilliness will be greatly increased. This result is probably due, among other things, to the actual increase in the number of red and white blood cells that are by-products of mitten frictions. The red blood cells are the ones that carry food to each cell and carry away cell wastes. The white blood cells are your standing army against disease; they fight illness and feed your body cells more efficiently when you learn how to take circulatory gymnastics.

With all these facts before you, don't you think you'd like to try a cold mitten friction tomorrow morning? ▲

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Please send all orders for products direct to the advertiser whose name and address appears with the ad.

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THE NATIONAL HEART INSTITUTE

(From page 19)

applications and consider them in relation to the total program. With its help, and with the technical aid of the special panels, the Institute is assured of getting the best advice and guidance available.

A corps of professional workers administers the program, reporting progress, keeping track of funds, preparing for council meetings, and handling a multitude of other complex duties.

Another program in which the Heart Institute has a major interest is the one involving, among health workers of many types, our public health nurse. This is the Heart Disease Control Program, administratively within a different branch of the Public Health Service—the Bureau of State Services—but functionally an integral part of the total Institute-led heart disease effort. The Program's activities are supported through the Heart Institute's annual appropriation. Its mission was also specifically laid out by Congress in the National Heart Act. This was to "develop and assist States and other agencies in the use of the most effective methods of prevention, diagnosis, and treatment of heart disease."

There are many ways in which the Heart Disease Control Program carries out this broad directive. They include the administration of laws that provide financial assistance to the States to help pay part of the cost of needed services to victims of cardiovascular disease. They include research in some of the community aspects of heart disease. They include a wide variety of technical advice and direct services to the States. Medical officers and other highly trained people are often assigned to help speed the application of laboratory discoveries, as well as refinements in heart-disease prevention, case finding, diagnosis, and rehabilitation.

Our public health nurse and the physician whose burden she helps to lighten can tell some exciting stories about heart-disease control in their community. They have been eyewitnesses to a decline in the last few years in the incidence of rheumatic fever and rheumatic heart disease.

As the family doctor's able assistant, the public health nurse has helped more than one rural housewife control her high blood pressure through nutritional guidance, and has coaxed many a bedridden farmer paralyzed by stroke to regain at least partial use of his limbs through long and patient exercise. Much of the help that reaches these patients is made possible through the Heart Institute and the Heart Disease Control Program.

A third major part of the Institute is its intramural research program. This is the part Bethesda residents think of when they speak of the Heart Institute, and the part Johnny, our young surgery patient from California, visited. It is the branch that carries out the portion of the Heart Act calling for "the *conduct* of researches . . . relating to the cause, prevention, and methods of diagnosis and treatment of diseases of the heart and circulation."

This program is focused in the 14-story Clinical Center of the National Institutes of Health. The building is practically a self-enclosed city, housing a 500-bed hospital, a large number of research laboratories, a chapel for Catholic, Protestant, and Jewish services, a bank, a post office, a barbershop, and many other facilities. The Heart Institute occupies most of two floors and part of a third, its share including accommodations for 102 pa-

INVENTORY

By REVAH SUMMERSGILL

What does a little girl put in her pocketbook?
A hankie, perhaps, and a penny or two.
But mostly she puts more important things into it:
Ribbons and checkers, a strap from her shoe,
A square of gold paper from yesterday's chocolate,
A picture she drew at the dentist's last week,
The sleigh bell she saved from Christmastime wrappings,
A green stone she found when she played hide-and-seek,
An envelope somebody mailed her a greeting in,
Little glass bottles from sample perfume.
These are the treasures she puts in her pocketbook;
She'd carry more if she only had room.

tients in the hospital side of the building and space for nine laboratory groups.

The patients are no ordinary ones. As in any hospital, their welfare takes absolute precedence over all other considerations, but in this one they are there for another reason as well: to make a contribution to research. All are selected on the basis of their usefulness to the research studies currently in progress, and suitability is always determined through consultation with the patient's own doctor.

Johnny, our little Californian, probably discovered that some of the Institute's doctors are in constant contact with the patients, but others never see patients. He may have made early acquaintance with some of the physicians in the General Medicine and Experimental Therapeutics Branch. Since he came to Bethesda for surgery, he probably got to know the doctors in the Institute's Clinic of Surgery. He will probably never meet any of the scientists in the Laboratory of Technical Development or the Laboratory of Chemistry of Natural Products.

In the Laboratory of Technical Development complex electronic and other instruments are designed for laboratory and medical uses as yet unforeseen by manufacturers. In the Laboratory of Chemistry of Natural Products plant and animal substances, some gathered from remote corners of the world, are submitted to painstaking chemical analysis in the search for better medicines to treat heart disease.

All the laboratories have a number of branches, and each branch conducts many separate projects at one time. All are carrying on research, bearing in some way on the central problem of heart disease. They are closely coordinated. A single experimental medicine for high blood pressure could require work involving as many as four, five, or even more of the ten laboratory groups. Arteriosclerosis (hardening of the arteries) and high blood pressure, the types of heart disease causing the greatest amount of death and disability, are the targets receiving the most intense research efforts.

I have touched on three major programs of the National Heart Institute. There are a number of other important activities in the fields of heart epidemiology (the study of heart disease as it develops in a community), heart biometrics (the study of the statistics of heart disease), and lay and professional heart information.

Cardiovascular disease is the greatest killer and disabler in the United States today, striking millions of productive citizens in the prime of life. We are proud of our organization and the part it is playing in the national struggle against this killer. Surely there are few others more important to the well-being of every American family. ▲

Household Health

A CHEERFUL HOME FOR JANIE

By MARY E. CASTOR

KEEP your home cheerful. Make it a place of such happiness that your husband and children will feel that they would rather be at home than any other place in the world.

One of the most successful mothers I know puts much thought into making home pleasant and serene. If Janie is having a birthday, mother plans the entire day for her, making her feel that she is special to the family. She prepares Janie's favorite breakfast and serves it with a flair. She arranges the family gifts around Janie's plate, and they sing a song to her. Mother plans a party for her and invites Janie's friends and relatives.

If a holiday is coming, mother brings in the children to help with the exciting plans. They help plan the Thanksgiving dinner, help make the Christmas decorations for the house. Joys shared are much greater than joys tailor made. All day mother keeps herself lighthearted and the children lighthearted. She makes all special occasions happy.

If her husband is celebrating a raise she and the children show daddy how proud they are of him, how much they love him. She puts on a home celebration with him in the place of honor. She sees to it that he has a small gift, a dinner featuring his favorite foods, an atmosphere of appreciation for him and his many contributions to the family.

Life is today, in the small dear things of family living.

Mother knows that when Janie and John are older, they will be happier about working if they learn to work cheerfully now when they have the desire to do things that may be a little hard for their small hands to accomplish. With effort and thought she teaches them to do even the less popular duties with a smile.

If Janie cuts her finger, she knows that mother's love and tenderness are ready with their soothing balm. She never sobs out her small broken heart unnoticed in a corner. In all her life Janie will never cut her finger without remembering mother's love. She will be able to meet the cut fingers of life with courage, because mother taught her to do so with fortitude in an atmosphere of serenity.

Mother teaches her children carefulness, but not tension. When Janie and John make small mistakes, however often, she doesn't make mountains out of them. Her children's happiness is more important than perfection in the home.

How could youthful delinquents come from such a home? ▲

Injuries From Back Yard Rockets

Boys who turn their back yards into Cape Canaverals are inviting injury. Firing off homemade Sputniks and Explorers has sent many a teen-ager to the hospital.

Three surgeons in Detroit report that they treated eight severe hand injuries from misfired rockets during the first six months of 1958.

The average age of the victims was about 15 years. "It requires but little imagination to appreciate that the problem of injuries to the hand from homemade bombs or rockets is one that affects young people almost exclusively, the wisdom or timidity conferred by advancing years militating against the unnecessary exposure of life and limb in search of bigger and better bangs," the doctors said.

It takes imagination and ingenuity to make a rocket. Dull-minded young people are unable to cope with the problems. Therefore, the injured patients "represent a group of highly intelligent children, able with their hands and addicted to building and managing quite intricate instruments and tools. That this type of individual should be so severely handicapped is a matter of some concern, more so when one notes the association of injuries to the face, eyes, and ears in a rather large number of cases."

The doctors making the report—in the *American Journal of Surgery*—are F. Augustus Arcari, Robert D. Larsen, and Joseph L. Posch of the City of Detroit Receiving Hospital.

In discussing thirty-seven patients, age 12 to 17, they noted that two died from their injuries; the vision of four was impaired, one permanently; several mangled their hands and lost from two to four fingers.

The one hopeful part about the injuries, the doctors pointed out, was that the youth of the patients gave them "excellent recuperative powers and remarkable capacity for compensating and adapting to disability." ▲

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You have heard the leaves rustle, but have you ever heard them talk? For this experience you need an interpreter, and Mrs. Lloyd is qualified by experience and through natural gifts to bring you the richest blessings from a contemplation of trees in the varying aspects of their seasons. There is no groping here for meaning—the reader sees through the clear vision of the author's keen analysis of life and rejoices in the way out of perplexity to spiritual joy and calm. "God's Clock" is one of Mrs. Lloyd's delightful poems that adorn the division pages.

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J. BYRON LOGAN

EYESIGHT—A Much-Prized Possession!

Of all the wonderful organs that we possess in this God-given body of ours, it is unanimously agreed that our eyes are among our most-prized possessions. The loss of eyesight alone can throw us into an unfamiliar world of darkness. Without sight the untold beauties and glories of all nature about us become just so many words or meaningless phrases. Without sight the changing expressions on our loved ones' faces, their joys and tears—these sights of immeasurable worth—are far beyond us, for they become unknown visions, even as our long-faded dreams. These precious moments of sight cannot be bought with mere dollars and cents.

It is therefore important that this priceless possession of ours be accorded the ultimate in attention when conditions demand. Any malfunction of our eyes should be given immediate attention by the most-skilled medical specialists.

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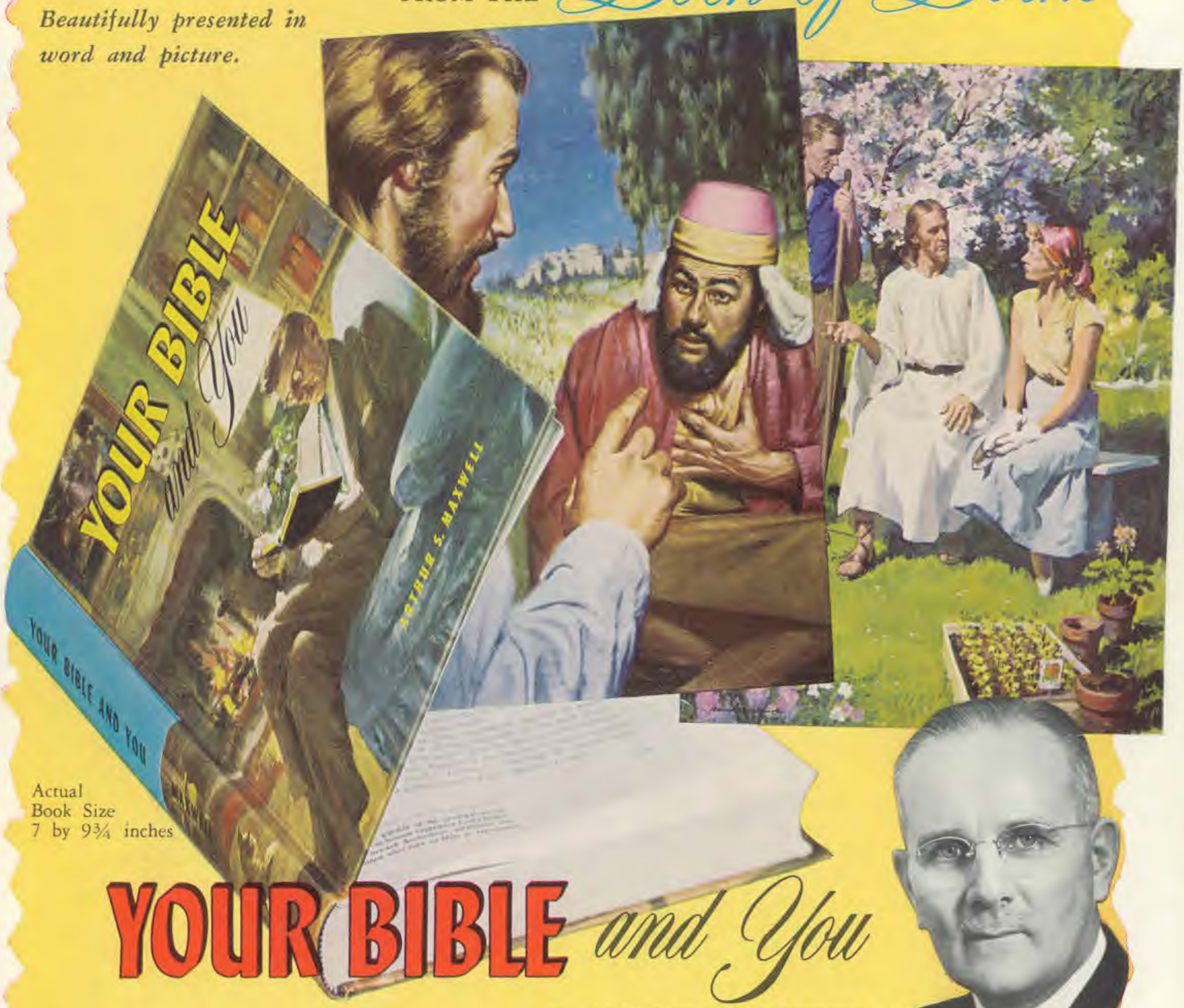

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