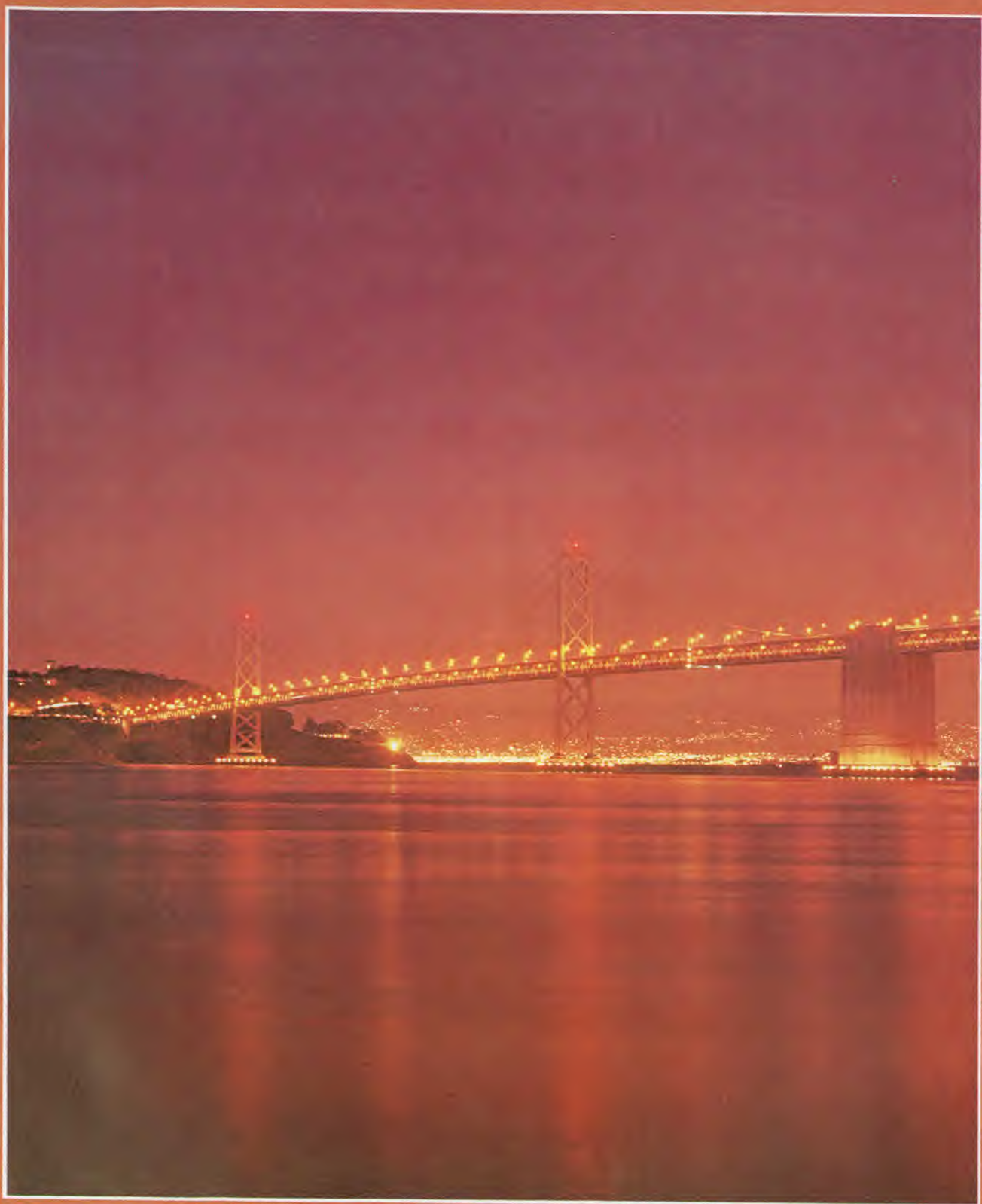


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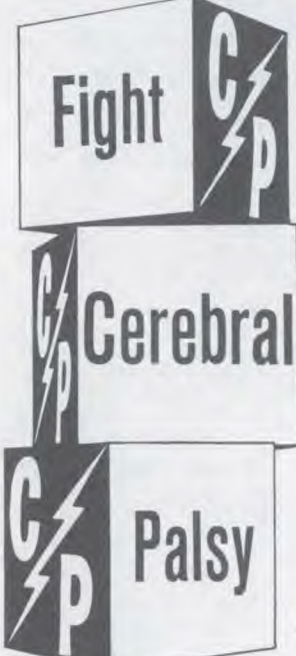
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LETTERS to the Editor



HOUSEWIFE WRITES

DEAR EDITOR:

I just received the current issue of the *LIFE AND HEALTH* journal, to which I am a subscriber. I enjoy the whole magazine from cover to cover. I love the colorful covers and enjoy trying out the recipes and the other arts, such as gardening and nursing.

Thanks for such a wonderful health journal.

MRS. CHARLES A. GOODMAN
Salmon, Idaho

OUR SEPTEMBER COVER



Color Transparency by Curt Kalder
From H. Armstrong Roberts

On our cover this month we see an unusual view of the Oakland Bay Bridge in California. This magnificent roadway spans the waters of the San Francisco Bay between the Old Town and Oakland. It has been photographed many times from many angles, but seldom has it been done with so brilliant an effect as on our cover.

The picture appears to have been taken from Treasure Island toward Oakland Harbor, with Alameda Island and the East Shore Freeway in the background. However, a native of the area may take issue with this conjecture and may be right.

The reflections on the still waters of this night scene may suggest a feeling of repose, but the many bright lights, concentrated in some areas, speak of a busy, throbbing city that never sleeps; of thousands of people whose lives are made up of joy, sorrow, health, sickness, success, calamity, birth, and death. ▲

MICHIGAN SUBSCRIBERS

DEAR EDITOR:

We just received the May, 1971, issue of *LIFE AND HEALTH*. I was commenting to my husband that I enjoy this magazine so much I almost wish it were weekly or at least biweekly, when he suggested I write a letter of appreciation and thanks for the tremendous articles *LIFE AND HEALTH* always contains.

We have subscribed to this magazine ever since we were married—three years—and plan to continue subscribing throughout our marriage.

Because we found *LIFE AND HEALTH* so helpful this past year we decided to send subscriptions to both of our parents. From comments they have made, the gift was much appreciated.

The articles in *LIFE AND HEALTH* cover a wide range of topics, all being most interesting and helpful. . . .

KENNETH AND VERA WIEBE
Berrien Springs, Michigan

SPASTIC-HAND ARTICLE

DEAR EDITOR:

The *LIFE AND HEALTH* for April, 1971, has one of the most valuable articles on the child with spastic hands, and how to help. ["Opening the Spastic Hand," by Ellis L. Thompson, R.P.T.]

I surely hope there will be more of such articles. It is most valuable in our work for the child or young person with brain damage or for physical therapy. . . .

JULIA M. GROW, R.N. ▲
Cave Springs Home School
Rehabilitation School for Handicapped Youth

The Home That Love Built
Pegram, Tennessee

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March of Medicine



Mechanical Heart

An eight-member team of surgeons, scientists, and engineers at the University of Utah, Salt Lake City, Utah, has taken another step toward development of a workable artificial heart. Early in April, 1971, the team kept a 187-pound calf alive for 102 hours with a mechanical heart, breaking their own world record of 92 hours, set in September, 1970.

Dr. Jun Kawai, chief of the implantation team, said, "It is highly significant that for the first time we were able to sustain function of the kidneys and other vital organs until the experiment was terminated."

The Utah doctors also successfully employed a technic known as hypothermia, which eliminates the need for a costly and complicated heart-lung machine. In earlier operations the machine was used as a temporary replacement for natural heart-lung function during implantation of the mechanical heart. But the hypothermia method involves lowering the patient's body temperature to 70° F. and then arresting blood circulation and respiration up to one hour while the new heart is installed.

"Using the hypothermia method, we have little bleeding and avoid the immediate blood-cell damage caused by heart-lung machines," explained Dr. Willem J. Kolff, chairman of the division of artificial organs.

Dr. Kolff, who developed the world's first artificial kidney, has been directing artificial-heart research for the past fourteen years. He told delegates to Utah Heart Association annual scientific sessions in Salt Lake City in April, 1971, that the success of the latest project "should give encouragement to those who question the prospect of a total replacement for the human heart."

The device that he and his colleagues are perfecting contains two single-chamber hemispheres coated with a specially formulated rubber compound. It approximates the natural heart in size and shape and can be contained within the chest cavity. Two tubes link it with an external energy source, which provides the pressure to expand and contract air sacs within the chambers.

Dr. Kolff says the chief problem yet to be solved is elimination of small clots that form when blood comes in contact with a foreign substance. Although the tiny clots usually originate within the mechanical

heart, they break loose and clog outlying parts of the circulatory system.

The Utah researchers are modifying the surface of the artificial heart's inner walls. They hope that with a more abrasive surface in the heart the clots will adhere to the walls and eventually form a smooth, natural covering on the organ's interior.

Dr. Kawai believes that progress toward a practical device will move much more rapidly after an animal has been kept alive for three weeks or more. "At that point the entire biological system begins to stabilize and adapt to its new conditions," he explained. He said the present goal is to develop a heart that will keep a person alive for at least three years.

Dr. Kolff believes artificial hearts are the "only long-range hope" for a significant percentage of the 600,000 Americans who die each year from coronary attack. "It is obvious," he said, "that there will never be enough usable human hearts available to fill the demand for transplants."



Diabetics' Employment

One of America's quiet tragedies is that of the young diabetic. He requires regular hypodermics of insulin to prevent episodes of dizziness and unconsciousness, and because of this he often is shunned by business as a kind of modern-day leper. Nevertheless, contends a leading physician and expert on diabetes, the very fact that he has diabetes usually makes him ideally employable.

This view is advanced by Dr. Paul Entmacher, medical director of the Metropolitan Life Insurance Company and chairman of the committee on insurance and employment of the American Diabetes Association. In the publication *Diabetes Outlook*, Dr. Entmacher suggests that "most young diabetics have such a degree of dedication and sense of responsibility—engendered by the discipline of their diabetic care—that they ask only for an opportunity to prove themselves and their worth."

In counseling young diabetics about employment, Entmacher adds, "I take a very positive approach and point out that today the diabetic is in a better position than ever to find a suitable job."

To be sure, many callings are still barred to the person suffering from the metabolic disorder that is diabetes. According to the Metropolitan Life medical director, the diabetic should rule out any potentially precarious vocations—for example, piloting an airplane, driving a bus or a truck, operating heavy machinery, or working on high scaffolds. "All such jobs entail danger to himself or others in the event of a loss of diabetic control," Entmacher explains. He also cautions against jobs that require changing work shifts, because a diabetic's control depends on strict regularity.

All the same, Entmacher says, there has been an increase in the number of white-collar jobs—with a corresponding decrease in manual labor—that has greatly enhanced the job market for diabetics. "The whole area of electronics—computer programming, data processing, and the like—is one example of the training opportunities that are open to the young diabetic and that fit his needs."

"I stress training opportunities," he continues, "and I urge the young diabetic to acquire the knowledge and skills that will make him a useful employee. He can't present himself to an employer simply as a diabetic and expect to be hired. He must have something to offer."

That something can range from a talent in the performing arts to a proficiency in sports. Careers in both fields, reports Entmacher, are as open to gifted diabetics at least in terms of health as to their nondiabetic competitors. Still another profession well suited to the diabetic's regimen is teaching.

The doctor adds that usually it is only the young diabetic who needs to take injections of insulin. He says that older people who have diabetes can keep it under control often through diet alone or by oral medication.

"Unfortunately," Entmacher says, "there is still discrimination against diabetics in the hiring policies of some firms," and he considers it important for physicians to help employers understand the desirability of hiring diabetics. Many companies are reluctant to employ diabetics out of fear of great absenteeism and prolonged illness; however, the insurance company medical chief says that "second-injury laws, which are on the books in more than forty States, relieve companies of much of the financial obligation for prolonged disability of individuals with a known impairment."

Indeed, Entmacher declares, even the doctor-short medical profession offers a place for some diabetics. He concluded: "I would not counsel a young man or woman strongly interested in a medical career, and who is well controlled and well disciplined, to give up thoughts of becoming a physician because of the irregular hours involved." ▲



For SHIRT-POCKET Poisons

Carbon Monoxide and Cigarette Smoking

IF YOU ARE a cigarette smoker and find that you are drowsy and peopless at times whereas formerly you thought you got quite a lift from your cigarette, it could be that you are a victim of shirt-pocket poisoning—carbon-monoxide suffocation.

Research on carbon monoxide in cigarette smoke was reported by Bertram D. Dinman, M.D., of the Institute of Industrial Health at the University of Michigan. Dr. Dinman's report appeared in the *Journal of the American Medical Association* of June 15, 1970.

Dr. Dinman said that oxygen is displaced by carbon monoxide in the blood, and this poison can cause chemical suffocation. It has detrimental effects on your body, ranging from cutting down your visual sharpness to hastening hardening of your arteries. It can cause nausea and dizziness similar to mountain sickness and reduction of the output of your heart.

America is alarmed at the smog problem and air pollution, but you probably do not realize that you have a greater smog factory in your shirt pocket in your packet of cigarettes than ever could come from smog in the atmosphere. The air of our cities rarely contains more than 30 parts carbon monoxide per million parts of air—30 ppm. Cigarette smoke streams have been reported to contain 400 to 40,000 ppm carbon monoxide, more than 100 to more than 1,000 times greater than smog-filled air.

In the course of normal body metabolism, carbon monoxide is a product of the breakdown of hemoglobin (blood pigment) into carboxyhemoglobin, which is an inactive oxygen conveyor. In the normal person about 0.8 per cent of hemoglobin is inactivated each day.

By contrast, the light smoker converts to inactivity 3 per cent of his hemoglobin, and the heavy smoker inactivates 8 per cent of his hemoglobin.

With as much as 8 per cent of the heavy smoker's blood cells unable to transport oxygen, he soon finds himself feeling tired, lethargic, slow of thought, and even becoming dusky skinned from the carbon-monoxide excess in his blood stream.

Here is what happens to him:

1. Visual acuity in low levels of light intensity is impaired when there is carbon-monoxide loading, as seen in the 3 per cent to 8 per cent range of carboxyhemoglobin of cigarette smokers.

2. In patients with heart disease, heart function may be reduced when levels of 7 per cent to 9 per cent carboxyhemoglobin are reached.

3. In animals cholesterol coating of blood vessels can be produced with exposure of 12 per cent carboxyhemoglobin, and on the basis of information about epidemics there are suggestions that this may also apply to people.

4. Mountain sickness that develops in high altitudes is significantly produced and aggravated by cigarette smoking. Smokers may develop chronic mountain sickness, whereas nonsmokers are quite comfortable at higher altitudes.

The most poignant body requirement is the need for oxygen by the brain. Anything that reduces oxygen circulation to brain cells may cause reduced mental efficiency plus possible permanent impairment of brain-cell function. For this reason the cigarette smoker who thinks he is sharpening his efficiency when he reaches for a cigarette should think twice. He may be poisoning his body and suffocating it by reducing the oxygen-carrying capacity of his blood stream by 3 per cent to 8 per cent and also reducing his mental efficiency by that much. His eyesight, his heart action, and his brain function will suffer from this shirt-pocket smog factory he uses.

We have been reading about harmful effects of cigarette smoking on the lungs—lung cancer and emphysema—which are bad indeed, yet we have been overlooking the insidious danger of carbon-monoxide poisoning, which can slowly poison the blood stream.

Cigarette smoking can cause heart disease by reducing blood flow and causing high blood pressure, but let us not overlook the slow suffocation of carbon-monoxide poisoning and

the resultant reduced oxygen-carrying capacity of the blood.

Although bad taste of food and diluted enjoyment of perfume are suffered by the cigarette smoker, these losses of pleasure are not life-threatening. However, insidious slow suffocation of carbon-monoxide poisoning, slow and steady reduction in breathing capacity seen in emphysema, and death-dealing lung cancer or heart attack are conditions that should cause any smoker to pause and think.

What can I offer in place of cigarettes?

1. Lots of money. The 50 cents a



One effect of smoking is the appearance of a tarlike substance on the smoker's lung.

day if put into a savings account and with accumulated interest in fifty years would be the astronomical sum of \$200,000.

2. Fresh air.
3. Better health.
4. More pep.
5. Greater enjoyment of your food.
6. More fun in life.
7. A close friendship with your Maker.

These are the dividends I can guarantee any heavy smoker when he exchanges his cigarette smog factory for fresh air.

Yours for better breathing,

J. Hewitt Fox, M.D.

PROFILES of Our Contributors



Albert C. Koppel, D.D.S. ("What Is New in Dentistry?" page 18)—a Washington, D.C., dental surgeon—grew up on a New Jersey potato farm. He attended Columbia Union College in Washington, D.C., received his dental degree from Emory University School of Dentistry, Atlanta, Georgia, interned at Garfield Memorial Hospital in Washington, D.C., and took a year's graduate work in oral surgery at the University of Pennsylvania Graduate School of Medicine.

During the Korean crisis he served two years in Germany as a captain in the United States Army Dental Corps.

Dr. Koppel has built his practice in the nation's capital. At intervals he has obtained licensure by examination in six States, and he has passed the national-board examination in dentistry. He says the constant study keeps him on his toes and in tune with progress in the dental field.

In 1965 he was awarded a fellowship in the Academy of General Dentistry, an organization that demands a program of continuing education for the dentist, and he is a member of the Greater Washington Academy of Dental Practice Administration. For 25 years he has been a member of the American Dental Association and of the District of Columbia Dental Society.

Dr. Koppel met his physician wife, the former Elizabeth Adams, when they were both 16. She is an anesthesiologist. In addition to her hospital practice, she administers general anesthesia to the dental patients. Two active teen-age daughters keep the Koppels young and in the swing of things.

Dr. Koppel is a former president of the National Association of Seventh-day Adventist Dentists.



Marian Sprague Strickland, M.D. (Mother's Counselor, page 22), was born in Worcester, Massachusetts. After graduating from South High School there she attended Atlantic Union College in South Lancaster, Massachusetts, and Columbia Union College in Washington, D.C., where she received a B.S. degree. She obtained her medical education at Loma Linda University, Loma Linda, California.

Dr. Strickland spent a rotating internship at Carney Hospital in South Boston, Massachusetts, and ten months studying contagious diseases at the Charles V. Chapin Hospital in Providence, Rhode Island. She received a staff appointment at New England Memorial Hospital, Stoneham, Massachusetts, where she remained for a year. After another year of practice in Worcester she spent a year as assistant professor of biology at Atlantic Union College, where she did some teaching and was the school physician. At the same time she worked at the YWCA in Worcester.

Since she married Blin Strickland, a teacher, of Canaan, Maine, she has lived in the pleasant country town of Canaan doing general practice. The Stricklands have three daughters—Naomi, Rachel, and Rebecca. The family has a small select herd of milking Shorthorn cattle on the farm, riding horses, and an English shepherd dog. They furnish music for special occasions, and Dr. Strickland is organist for two area churches.



Mildred Presley Griffin ("Teach Yourself to Be Happy," page 14) has been writing feature, hobby, and travel articles for LIFE and HEALTH since 1953.

Since her marriage to Stanley Griffin, president of Center Scope Products, Inc., in 1963, she has lived in Battle Creek, Michigan, where both she and Mr. Griffin grew up. They graduated from Battle Creek Academy,
(To page 34)

RHEUMATOID ARTHRITIS has been known and described as far back as 700 B.C., when the king of Assyria, Esarhaddon, complained to his doctor, "My arms and legs are numb. I am consumed by fever, which burns in my limbs." Dr. Arad-Nova diagnosed this inflammation of the hands and feet and commented that he had exposed himself to the wind and told the king to use licorice lotion on the skin, hot packs, and massage. This treatment was supposed to improve the king's physical condition by means of an outbreak of sweating.

The doctor, in accordance also with some modern opinion, had the idea that the illness was caused by the state of the king's teeth, and he prescribed, "The master must have his teeth removed, because the gums are inflamed. The pain will instantly disappear and his condition will be satisfactory."

We may ask, "Why has medical science not overcome

such an ancient disease?" The answer is that science has failed to substantiate the causative factors in the outbreak of rheumatoid arthritis. The focus of infection described in Esarhaddon's story is complicated because only a small number of the people who have the disease improve after removal of teeth or other chronically infected parts of the body. During the past decades it has been hoped that science would experience a breakthrough on the cause of rheumatoid arthritis and development of a treatment that would remove the symptoms.

So long as we can describe the illness only from the symptoms, its laboratory findings, and X-ray changes, rehabilitation may be limited in its results, even though progress has been made in diagnosis, treatment, and avoidance of complications. The fact is that most cases treated from an early stage of the disease can be assured of continued working and walking ability.

Rehabilitation of the Rheumatoid-Arthritis Patient

R J. D. HENRIKSEN, M.D.



Rheumatoid arthritis may begin with inflammatory swelling of one or two joints, but it has a tendency to spread over the body, taking on a chronic and progressive form until the fire burns out. If no treatment has been given, the disease often leads to characteristic deformity and disability. Arthritis first attacks the synovial membrane of the joints, producing greater-than-normal amounts of fluid. Inflammation may affect the cartilage, which may be eroded, and thus cause more pain and discomfort. Other symptoms may be mild fever, anemia, fatigue, and weakness. The weakness comes from the tendency to increase rest of the joints and muscles because all movement hurts.

Arthritis may attack a person of any age. When it attacks children, the symptoms are more acute and severe than when it attacks adults. Already 11 million people in America are afflicted with some form of arthritis. Of that number there are 4 million or 5 million affected by rheumatoid arthritis. Among these people are about 200,000 children.

Arthritis used to be America's leadingcrippler, causing more people to be under welfare assistance and Social Security disability than any other factor.

Considering the great social and economic importance of arthritis, the medical world should be alert to the seriousness of the problem. If only there were sufficient facilities and medical help to treat this disease from its early stages, much loss of work hours—not to mention pain and suffering—could be avoided.

Rehabilitation of rheumatoid arthritis should begin when the symptoms appear, not when a lot of damage has been done by deformity, contracture, and weakness.

These problems complicate the disease, making recovery difficult.

The treatment that leads to rehabilitation of rheumatoid arthritis includes many phases—rest, physical therapy, occupational therapy, diet, medicine, surgery, and often job retraining. The patient often lacks motivation for such a program, because he is used to being cared for and is not trained to take care of himself. He may feel mentally depressed and need stimulation. Psychological therapy then may come into the picture in order to carry the program through to success.

Importance of Rest. Because the tendency to avoid the use of arthritic joints is very common in patients—leading to wasting of muscle power, increasing stiffness, and finally inability to move—it is difficult to understand why rest is one of the most important parts of treatment. Rheumatoid arthritis attacks the whole body, and there is a demand that all the body get an increasing amount of rest each day.

The normal person can get along with seven or eight hours' rest a day, but the rheumatoid patient needs ten or twelve hours' rest a day, but not at the same time. A rest period before noon and another after noon, combined with normal rest at night, enable him to carry on restorative function for the necessary time.

One thing that should be stressed is that it is not profitable to have the rheumatoid-arthritis patient sitting in one spot for several hours with flexed hips and knees, because this poor position often leads to contracture and stiffness of the joints.

During the resting period the patient should lie down. Do not allow a pillow under his knees while he is lying down, also do not have many pillows under his head, because they lead to poor posture.

Physical Therapy Needed Daily. Physical therapy is perhaps the oldest form of treatment for rheumatoid arthritis, and it is the treatment that has been developed in the most rational way to benefit the patient.

Many forms of water treatment have been used. Nearly forty years ago steam treatment, which created artificial fever, was begun for arthritics. Keep in mind that heat treatment continued for two or three hours often weakens the patient to the point where other physical therapy has to be neglected. A short heat treatment with underwater exercise or hot packs relieves stiffness, aches and pains, and fatigue that would prevent the patient's tolerance of other therapy. Underwater treatment is advised because the buoyancy of the water helps the patient to exercise without undue strain.

Deep heat in the form of short-wave diathermy and ultrasound may be applied to the most seriously affected joints. Paraffin baths to hands and feet have been highly effective.

Massage is one of the oldest forms of treatment for the relief of patients' discomfort. Even though it has been given up in treating many other ills, it still is successful in arthritic conditions. There is no reason to suppose that it would not be effective in other conditions as well.

Massage combined with manipulation of the joints in the form of passive exercise (exercise carried out by the nurse for the patient) in stretching and bending, aimed toward achieving normal range of motion, brings the patient to the third important phase of physical therapy—therapeutic exercise. The purpose of exercise is to



Rheumatoid arthritis is a disease that begins with inflammatory swelling of joints and often leads to deformity and disability.

maintain mobility of the joints and improve muscle function. For best results it is prescribed individually for each patient in order that the treatment will be planned for what he especially needs to help his condition the most.

Exercise should be carried out in two or three periods a day, giving the opportunity for patients to rest between strenuous activities. These exercises often consist of a progressive resistive plan with weight lifting, calling for greater and greater energy from the patient. The result is increased tolerance for the difficulty met in bringing full range of motion to stiff joints.

Complicated apparatus has been invented to promote functional ability of the patients, but simple exercise in a pattern close to normal function helps the patient to regain ability faster than any other plan does. If the patient's leg joints are inflamed, he is not allowed to walk, because weight bearing increases joint strain to the extent that exercise has to be done sitting or lying down.

When inflammation in the affected joints has subsided, the patient is allowed to walk a little at a time at first, then more and more. In the beginning of treatment, training by walking in water tanks helps the patient to walk sooner and a normally coordinated gait strengthens muscles and joints.

Occupational Therapy Must Not Be Neglected. Nothing gives the rheumatoid-arthritis patient more encouragement than occupational therapy. He gains confidence when he relearns the activities of the daily living process and how to take care of his personal needs, rather than having other people do these things for him. Such normal daily activities as weaving, sewing, painting, writing, modeling, and making ceramic articles increase his sitting and standing tolerance and build up his arm and hand strength.

Occupational therapy helps the patient early to evaluate his ability to return to his former occupation and his need for retraining by adaptation to his situation.

Special appliances can help the patient perform acts that otherwise are impossible in the severe form of the disease, such as combing his hair, buttoning his coat, putting on his shoes, socks, and pants, going to the bathroom, and transferring to bed or wheel chair.

The chance to mix with other patients (To page 21)

Snakes abound in many areas. Be informed now concerning their habitats and ways.

The Snakes in Your Life



ARE you likely to be poisoned by a venomous snake? What will happen if you are? What must you do if a snake has poisoned you or someone else? These are questions anyone who wanders into the countryside may be required to answer promptly.

Snakes are considered by many to be the most repulsive of creatures. Venomous snakes have been found in every State of our Union except Maine, Alaska, and Hawaii. Approximately fifteen hundred people are bitten yearly by venomous reptiles in America. Since our four kinds of poisonous snakes tend to be distributed in variable areas, resultant bites vary. These four kinds of venomous snakes are rattlesnakes, widely distributed in the Midwest and the Southwest; water moccasins, or cottonmouths, found along the Florida and Gulf coasts of Mexico; copperheads, found chiefly in Eastern and Southern United States but sparsely in the Midwest; and coral snakes, found in Arizona and in the Gulf States.

Considering the number of bites by poisonous snakes annually, the death rate of fourteen per year from snake bite does not seem too severe. Some of these deaths no doubt could be prevented if more people were equipped for the emergency. The greatest number of bites occur in Florida, then in southern California, Arizona, Oklahoma, and Indiana. Of these, six out of every ten bites are made by rattlesnakes.

There are about thirty different species of rattlesnake, of which the diamondback and the sidewinder are the most talked about. The diamondback is named for the diamond-shaped configurations on his back, and the sidewinder is named for his manner of tossing himself sideways when moving about.

The hollow fangs of the rattlesnake are connected with venom glands. The fangs lie retracted backward until the rattlesnake is ready to bite, then they are thrown forward at a right angle to the jaw so that when the snake bites down the fangs penetrate the body at the same time the

glands envenomate the subject bitten. Rattlesnake fangs continually are lost and replaced by new ones, which are always ready to assume their function in the discharge of crotoxin (snake venom).

It is thought that the rattlesnake ejects only about 50 per cent of its venom in one bite. The lethal dose of venom for human beings is thought to be about one milligram per kilogram of weight. That is why a large person does not suffer so much effect as a small child receiving the same amount of venom.

The degree of reaction from rattlesnake venom differs. The poison from the Southern rattlesnake and the sidewinder is the most toxic, and the poison from the red rattlesnake is the least toxic. It is thought that the venom of the Southern rattlesnake is about seven times more toxic than that of the copperhead.

Because most deaths resulting from snake bite occur in Southeast United States it must be assumed that the Southern cottonmouth, or water moccasin, has the most toxic venom.

The venom of different snakes varies. That from the southern California rattler produces a great deal of destruction of tissue at the point of envenomation besides being injurious to blood cells, blood coagulation, blood vessels, heart, the respiratory system, and nerve and muscle system. Because the inner lining of blood vessels is affected by rattlesnake venom, blood plasma oozes out from the vessels, especially in fatal cases. Evidence of bleeding such as nosebleed, blood in bowel movements, blood in the urine, blood from the lungs, (To page 27)

R AMIL J. JOHNSON, B.Sc., M.D.

MORE THAN 50 million Americans go out camping. What is the allure that attracts so many people to the wide-open spaces? Some declare that it is an urge within us all, part of our heritage, a yen with which we were born. The roaming Indians were this nation's first campers, and today's apartment dweller seems unable to divorce himself from this rural outdoor past. There is scarcely a man or woman who does not retain a longing to be close to nature's beauty, to be a part of it. He sighs for relief from the artificial world with which he is surrounded.

The wilderness—and there still is a great deal of it left in our land—is the only place to which man can go to get away from his own inventions and contemplate original creativity.

Camping is ideally suited for families as well as individuals for short periods of relaxation and refreshment, and the wise person does not wait to take such a vacation until stress forces him to quit.

When the human nervous system is pushed too far, when a person thinks that he cannot stand the strain of overwork any longer, this reaction should be his signal to relax before his mind denies that the stressful situation exists, and he collapses.

Since the 1930's more and more people have taken to camping. Many thousands used campsites in national parks for years before privately owned campgrounds were made available to the public. It was rugged when tenting meant the crudest kind of outdoor living, but this stage of camping had its attraction for some who, early in the day of the automobile, wanted to get away from it all.

Manufacturers gradually entered the field, bringing

camping to a fine art. Hence, today we have hundreds of varieties of mobile campers, thousands of campgrounds, and millions of camping enthusiasts. Instead of a warm-weather recreation, camping has become a four-season attraction as equipment has improved. Usually in the winter season, while waiting for spring to come, manufacturers of camping facilities all over the country show off new equipment. The basic idea is to display safer, improved, more easily handled mobile campers.

Comfort is a prime requisite for camping rigs, especially those designed for winter use. Good insulation, adequate heating, tanks for fresh water and sanitary use, are standard equipment in many cases. Recreational vehicles, as these rigs are called, can be hooked up in campsites to water and electricity on overnight stops.

The enchantment with camping knows no age, but children especially enjoy going out with their parents.

It is not necessary to make a big camping investment at the outset, and you are wise to wait until you and your family decide "This is for us." Campers cost from \$395 up—and *up* can mean \$5,000 or more. The simplest rig is a small covered trailer that can be hitched to your car. Large trailer-campers require a heavy-duty suspension on your car axle and six- or eight-ply tires. You should not be under-equipped to pull a heavy camper. Conversions can be installed on truck bodies, and some of these recreational vehicles are as long as nine feet six inches and cost up to \$2,500 for the camper and as much for the truck. However, if you are new to camping, \$295 should be sufficient to buy the small covered trailer-camper and to get you going on this wonderful new way of life.

What are the advantages of owning a camper?

1. Camp traveling costs about one third the cost of a motel overnight stop, especially if you have small children.
2. Then, outdoor people are a friendly sort. They are at one with you in interests. This does not

(To page 25)

Camping Can Be Great!

By LOUIS B. REYNOLDS, M.A.





Jack Wilson's Stomach-ache

R. H. O. SWARTOUT, M.D., D.P.H.

SAMUEL WILSON is the only businessman in Eastlake, our quiet little town, who specializes in hardware. Tonight dusk is drawing near, and he has just come home from his store. What does he find but his teen-age son, Jack, groaning with a stomach-ache.

Jack's mother is hovering over him worriedly, for it is not common for the rapidly growing youth to complain about anything, except perhaps to claim sometimes that he cannot get enough to eat.

Big sister, Maggie, who is always scolding her stripling brother for eating too much, is in the room. Her face has an I-told-you-so expression, as if she thinks he is getting no more than he deserves.

Mr. Wilson takes a careful look at Jack and asks, "What did you eat for lunch, son?"

"I didn't eat much lunch, Dad," Jack answers between groans. "I didn't seem to want any. About two hours ago a pain hit me in the pit of my stomach, and it got so bad I had to ask Don Jones to take my evening paper route so that I could come home. The pain has spread downward, and it has been getting worse ever since. I have gagged and tried to throw up half a dozen times, but not much would come."

"Have you called Dr. Green, Mother?" Mr. Wilson inquires of his wife.

"I tried to call him about an hour ago, but he had a waiting room full of patients and was too busy to answer the telephone at the moment. His office nurse told me to watch Jack carefully and call again later if I thought anything serious was wrong. Old Dr. Gray is out of town and won't be back until tomorrow. I don't know what to do. Jack seems very sick to me, but I don't want to call Dr. Green again when he is so busy and then find out that my boy doesn't need him after all.

"Sam, your mother used to know almost as much as a

doctor does about what to do for people when they are sick, and you learned quite a bit from her as you helped her take care of your younger brothers and sisters. You know I was the youngest child in my family, and I have no knack about such things. Besides, you have read much more than I have about sick people. My eyes won't stand much reading, anyhow. You may think I am rather slack and helpless, but I would do something for Jack if I knew how."

"I'm not blaming you, Mother," Mr. Wilson says. "You do your part in other ways. But somebody in every family should know a little about sick people and what to do for them. It is not always possible to get a doctor in a hurry, which I think may be the case with us now. Now that we cannot get a doctor before tomorrow, I must see what I can do about Jack's stomach-ache. It's distressing to hear Jack groan like that."

"Oh, I don't think there's anything wrong with him that a good dose of castor oil won't cure," Maggie says.

"No, daughter, Jack will get no castor oil—at least not until we know more about what ails him," her father says. "It would be all right to give him some castor oil if he had indigestion from eating too much or from eating irritating food, but that doesn't seem to be the trouble this time. Remember that it is nearly night and he hasn't had a full meal since morning."

"From what I have read, I judge that if he were an older person we might think of several other causes for his pain. It might have come from a ruptured ulcer of the stomach or duodenum, but if it had started from such a cause the pain would have hit him like a shot, and it would have been severe right from the start. If that were what is wrong with Jack, he wouldn't have been able to walk home. His pain may be a sign of a complication of any one of several other diseases, but most likely any one of them would have become known to us long ago through

early symptoms, which would tell us what is wrong. "No, Maggie, if a fourteen-year-old boy's stomach-ache or any other young person's stomach-ache doesn't come from indigestion, we must think of appendicitis or intestinal obstruction as the most likely cause—appendicitis being much more common than obstruction. If Jack had intestinal obstruction castor oil would do no good. He would throw it right up again. If he had appendicitis, giving him castor oil or any other strong laxative might kill him."

Turning to his son Mr. Wilson says, "Push down the blanket, Jack, and let me look at and feel of your stomach. Can you straighten out your right leg so that I can get at you better?"

"Oh, Dad, be careful," Jack whines. "No, I don't want to straighten out my leg. When I keep it drawn up this way the pain is not so bad."

"All right, son, I'll be as gentle as I can," says Mr. Wilson as he leans over and passes his hand carefully over Jack's abdomen. Even a light touch tells him the muscles on the right side are much more tight than those on the left. Then he begins to apply moderate pressure here and there with his finger tips, asking Jack to tell him if the pressure makes the pain worse at any particular place.

Jack's face is twisted with apprehension, and he winces whenever his father's fingers press with slight firmness on any part of his abdomen, but when they touch a certain spot he cries out, "Oh, Dad, don't press on that spot again! I can't stand it!"

If at that time a line had been drawn from Jack's navel to the point of his right hip bone, the tender spot would have been a short distance below the middle of the line.

Straightening up, Mr. Wilson says, "I don't think Jack has intestinal obstruction. If that were the trouble he would act even sicker—he would be retching and vomiting every few minutes, and his abdomen would be blown up like a toy balloon. If I thought he had intestinal obstruction I would insist that Dr. Green see him or else call an ambulance to take him to the nearest emergency room.

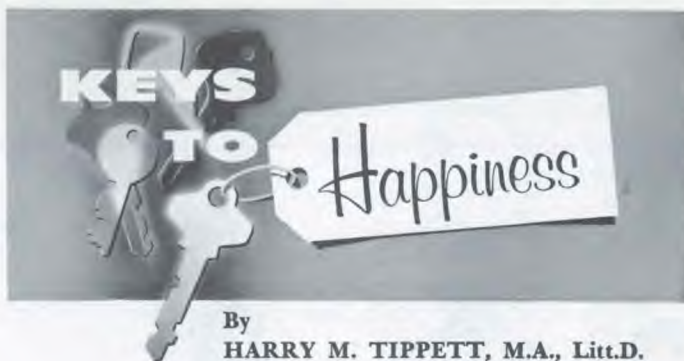
"He may have appendicitis, though, and that can be almost as bad. Maggie, please go and get the fever thermometer. See if you can remember what I have taught you about taking a temperature."

Maggie gets the thermometer and shakes it down until the top of the mercury column stands below 96 degrees, disinfects it by soaking it in rubbing alcohol, rinses it under the cold-water faucet, and puts it into Jack's mouth, telling him to hold the bulb under his tongue for at least two full minutes. Then she takes it out of her brother's mouth and looks at the mercury column.

"A hundred and one degrees, Father," she announces. "There must be something wrong with Jack besides over-eating, after all."

"Yes, daughter, I am afraid there is. It looks more and more like appendicitis. Go and get the ice bag. Fill it half full of finely cracked ice and bring it here—and bring a small Turkish towel, too. Fortunately, we have an ice bag, even though we don't have to use it often."

When Maggie has done as her father directed, he lays the towel over the tender spot on Jack's abdomen and gently places the ice bag on it. Then he tells his wife and daughter that he will stay with his son while they bring him his supper on a tray and then (To page 32)



By
HARRY M. TIPPETT, M.A., Litt.D.

At Grips With Life

A MYSTERIOUS disease took the life of the eldest son of an American family as he was emerging into maturity. The post mortem examination enabled the hospital doctor to advise the parents that the heredity aspects of the disease made it a potential danger to the rest of the children. Writing of her deep grief over the loss of their boy the mother said, "His suffering was his legacy to the family and helped me to come to grips with life."

Confronting and enduring tragedy is only one of the ways we may face up to life. Sometimes it takes the form of dignified restraint under calumny and undeserved abuse. Yet once more, it may be a marshaling of courage to begin again amid the rubble of total deprivation of status or economic worth.

Having lost an eye in one naval engagement and an arm in another, Lord Nelson could hardly be accused of phony dramatics at Trafalgar in shouting the challenge, "England expects every man to do his duty." Doing one's duty in the task of the hour is coming to grips with life on the level of the commonplace.

Shaking one's fist at the sky, splashing an article of revolt with four-letter obscenities, rebelling against traditional culture with raucous dissonance in music and distortion of symmetry and form in art, are all within the scope of individual freedom, but the mood of such demonstrations is mockery of life, not a coping with it.

The greatest values in human development come from inward transformation and adjustment to changing circumstances, not outward revolution. The Bible expresses the principle, "Except a corn of wheat fall into the ground and die, it abideth alone: but if it die, it bringeth forth much fruit" (John 12:24). Yielding to the nutrients around it, its increase is thirty-, sixty-, or a hundredfold. Self-discipline, even sometimes to abnegation, is facing up to life in many a situation. The champion boxer has to learn to roll with the punch. To retrieve values from salvage, gains from losses, advancement by detour—this is progress, this is fulfillment, this is one sure road to ultimate happiness.

On the national level, coming to grips with world problems is in expanding the principle of amicable adjustment, for the divine promise of security is to the peacemakers, not to militant peoples matching nuclear armaments. "Blessed is the nation whose God is the Lord" (Psalm 33:12). ▲

Teach Yourself to Be Happy

By MILDRED PRESLEY GRIFFIN



YOU CAN TEACH yourself to be happy, just as you can teach yourself to be unhappy. The side effects of happiness are much better than those of unhappiness, being more conducive to a healthier and longer life.

Happiness is not forward. She does not come where she is not wanted. You have to create an environment where she can thrive, and then lure her with your smiles and kind words.

Some think they would be happy if their ship came in or if they could retire, but wealth does not bring happiness, nor does idleness. Happiness comes from within. It can be greatly increased by studying to obtain it. Would it not be wonderful if we could take courses in happiness as we do in hygiene?

Furnishings of a home are never

so important as the people who live there. Never be too busy to give or receive affection.

In the morning you can set the tone for a happy day by greeting everyone with a smile and a few cheery words. The smile and the cheery words will come back to you; if not at first—because you are beginning a new way of life—then later, when people become accustomed to the circumstances of the new day.

The happiest people are those who touch life at the greatest number of points. The unhappiest people are those who have few interests. If one of these interests is taken away, these people are miserable.

The secret of contentment is to create minute-by-minute happiness. Never take time out to feel sorry for yourself. Self-pity will only weaken you and make you

miserable. Force your mind to dwell on happy thoughts.

Cultivate the spirit of adventure. Zest for living does not come naturally. It has to be cultivated. Begin by trying to take an interest in everything about you. There are many fascinating things in this wonderful world, and the spirit of adventure will grow and grow as you discover new interests. Learn to handle binoculars, a microscope, and a camera expertly. You will be astonished at the beauty you have been missing. Once you are exposed to these delights, never again will you be bored. Adventure unlimited is free for eyes that see in this world that we call ours.

Beware of complaints, even about the weather. You cannot change it, but you can discover beauty even in a storm. Just notice how clean the air smells after it has

been washed by rain. If your children hear you complain about the weather, they may learn to dislike any kind of weather that interferes with their plans. All weather serves some divine purpose.

My mother used to call thunder and lightning God's fireworks. We children would press our faces to the window until we saw the lightning flash, then, laughing, we would run to the center of the room where mother had piled some pillows, and we would cover our ears before the thunder rolled in upon us. We were having so much fun that we did not think of being afraid of the thunder. Today, although grown, all of mother's children and grandchildren love a storm.

All of us have anxiety and trouble, but we should try not to dwell on problems. Solve any that you can, and take the unsolved ones to God in prayer. Leave your burdens with Him, for He holds up the government of worlds and you cannot weary Him. He has a thousand ways to solve your problems of which you know nothing. Have faith in Him.

Make someone else happy, and you will be happy yourself. There is a deep underlying truth here. We must all learn unselfishness, because it is natural for us to be selfish. Notice how self-centered babies are. Most parents try to teach the lesson of unselfishness to their children early in life, even though they themselves may not have learned the lesson perfectly.

It is important to keep our bodies in good physical condition. It is easier to be happy when you feel well. However, some invalids may be happier than some well people are. Many musicians who wrote great, happy, and inspiring music, and authors who wrote great books showing love and un-

derstanding, were in pain or under some severe physical handicap during the time they were writing.

Doctors recommend that we be as careful of the thoughts that we allow to enter our minds as we are of the food that we take into our bodies. This concept includes the books we read, the music we listen to, the television programs we

The sights and sounds of nature and the interesting contacts we have with people all contribute to self-induced happiness.



watch, and the friends we hold close. Such care develops good mental health. It is our thoughts today that fashion our dispositions and shape our characters for the future. Today's thoughts will make us either happy or miserable tomorrow.

At a time in my life when fate handed me blows almost too hard to bear, I came upon a poem that helped me to raise my sights. I remember only the first part. Perhaps you know the other verses, or the author, and will advise me as to what they are.

"The day will bring some lovely thing—

I say it over each new dawn—
Some gay adventurous thing
To hold against my heart when it is gone.

And so I rise and go to meet
The day with wings upon my feet."

I began saying these lines over and over each morning, all the while watching for that something special. I always found it. Perhaps it was the trilling song of a bird, the pungent smell of pine, or the beauty of a single rose. Often it was the smile of a friend, the laughter of children, or a red-gold sunset gloriously coloring the sky.

Gradually I found myself dwelling on the happy, special things I found each day and less on my problems and sorrows. Such a change requires practice, but I know from experience that it promotes health and happiness.

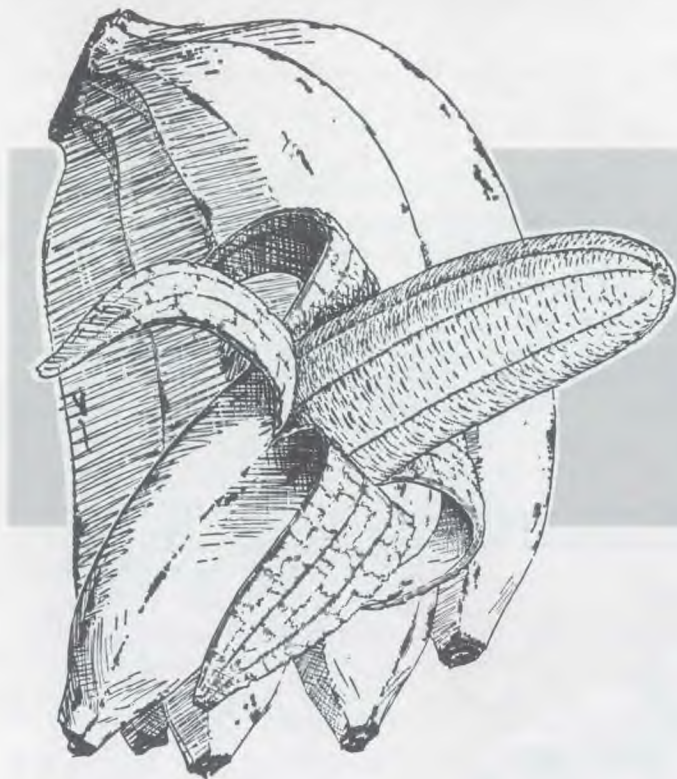
Although a hobby may not bring complete contentment, hobbies do boost happiness. Let us examine a hobby. Whether painting pictures, collecting stamps, knitting, or cooking special dishes for those you love, a hobby is simply working at something that interests you, and this helps to make you happy.

Joyous happiness can become a way of life if you believe that God made the world and everything in it for your enjoyment. The sights and sounds of nature become to you things of beauty. The clouds, hills, trees, rivers, and flowers will never again look the same to you. Even people look more like brothers when we realize that we are all sons and daughters of God.

Practice feeling happy, and you will find you really are a happy person, and happy people are those whom others like to be around.

At the end of the day, for a good night's sleep earnestly try to count your blessings instead of sheep. You will waken happier and be ready to put on a smile.

When you have brought the upward look into all your experiences, you will know the true meaning of joy. ▲



Beautiful Bananas

By LUCILLE J. GOTHAM
DIETITIAN

THE PALMLIKE banana plant with its twenty huge leaves reaches a height of ten to thirty feet. Botanically it is not a tree but is an herb. It matures in about 18 months and produces only one huge stem of bananas, which weighs between 50 and 125 pounds. Bananas never grow from the tiny seeds in the fruit. Roots of the banana plants that have produced a stem of bananas are saved and planted in rows about sixteen feet apart. They need rich soil, warm weather, and much water. Usually they are irrigated.

As the banana plants develop they require much care, including regular spraying. Some kinds are more resistant to pests than others are. Bananas are always harvested green. If left on the plant, they develop an unpleasant flavor.

If you live in the deep South anywhere from Florida to California, you probably can grow banana plants in your garden.

The favored variety of bananas is *Musa cavendishii*—small, sturdy, and well-flavored fruit. It is popular in South America, Jamaica, Central America, and the Canary Islands.

Bananas originated in Southern Asia. Historical records show they have been cultivated in India for more than 4,000 years. In some countries they are the chief food.

Many people enjoy cooked ba-

nanas. The plantain type of banana is one of the best for cooking. In India the people use the blossoms of certain banana varieties in curry dishes.

In tropical countries banana leaves serve as roofing material. The people weave shredded banana leaves into cloth and mats. They make leaf fibers into twine.

Americans import most of their bananas from Ecuador, Brazil, Honduras, and Costa Rica. It is thought that the first bananas to reach this country arrived in New York City from Cuba in 1804. They were individually wrapped and sold one by one.

The variety of banana usually on the market is the long yellow fruit called Gros Michel (Big Mike). Besides choice fresh bananas every day in the year, we have special banana products. Dry banana flakes are on sale at drugstores and specialty food shops. They make delicious milk shakes and pudding. Mexico sends us dried sliced bananas that look and taste like dried figs.

There are banana varieties that seldom reach our stores. Jamaica produces a red banana with a delightful flavor. It is not a success commercially because the bananas fall off the stem readily. A newspaper story says that Thailand has eighteen kinds of bananas. Malay has a banana with rose scent and flavor. India and the Philippines have their special

bananas. As air express expands, these varieties may be imported.

Bananas have been used successfully in special diets. A banana that is neither too ripe nor too green has the best flavor. A banana should be eaten slowly and chewed thoroughly. It can be broken up and beaten smooth with a fork, an electric blender, or an egg beater. Banana purée often gives quick relief from stomach burning.

In hospitals bananas are served in a soft, bland diet; a soft, bland, low-residue diet; a modified ulcer diet; and in other diets.

A research report showed that of more than thirty fruits tested bananas are richest in vitamin B₆. It showed that bananas have 5.94 micrograms of this vitamin per gram. The fruit next richest in vitamin B₆ is avocado, at 4.5; then golden raisins, at 3.33.

Bananas are rich in magnesium. Magnesium and vitamin B₆ have been reported as favoring a normal level of cholesterol in the blood.

Small amounts of vitamins A, B₁, C, B₂, and the minerals calcium, phosphorus, and iron are found in bananas. They furnish small amounts of fat and protein. A banana of medium size, weighing three and one-half ounces, has 99 calories. Because bananas are quickly digested, they are a source of quick energy.

There are about three bananas to a pound. Bananas flecked with brown

are considered just right for infant feeding and recipes such as bread and cake. Bananas can be kept in the refrigerator if tightly covered. Skins darken, but this change does not injure the fruit except for display in a fruit bowl.

You may wish to try these recipes:

Special Banana Milk Shake

- 1 ripe banana
- 1 cup skim milk or buttermilk
- Vanilla, lemon, or almond flavoring to taste
- 1 teaspoon honey

Beat the banana with the milk in an electric blender or with an egg beater. If you use an egg beater, mash the banana first with a potato masher or a fork. This combination makes a flavorful drink with nothing added, but if you wish, put in a little vanilla, lemon, or almond flavoring. Sweeten to taste with the honey. Serve in a glass with a slice of banana set on the rim.

Banana Nog

- 1 egg, separated
- 1 tablespoon honey
- Anise seed
- ½ cup milk
- 1 ripe banana, beaten smooth
- 1 cherry or berry

Separate the egg, and beat the yolk with the honey in the top of a double boiler. Add a few anise seeds if you enjoy the faint licoricelike flavor. Add the milk and cook until thickened. Fold in the well-beaten egg white, and cook for two more minutes. Cool and fold in the banana, mashed with a fork and then beaten smooth. Serve in a glass and garnish with a brightly colored cherry or berry.

Banana Malted Milk

Make a banana milk shake, and add a large tablespoonful of malted milk.

Three-Fruit Shake

- 1 banana, sliced
- ½ cup pineapple
- ¼ cup orange juice

Blend the fruits and serve with a tiny mint leaf or a spoonful of sherbet.

Banana Punch

Place some fluted slices of banana on top of your punch bowl with cherries, small melon balls, or other decorations to enhance the punch.

to enhance the punch.

Sliced-Banana Sandwiches

- Bananas
- Whole-wheat bread
- Butter
- Mayonnaise
- Pineapple or orange juice

Slice bananas thinly lengthwise. Dip them in the fruit juice to prevent darkening. Arrange them on slices of the bread spread lightly with butter and then mayonnaise.

Banana-Peanut Butter Sandwiches

- Bananas, sliced
- Pineapple juice
- Peanut butter
- Bread of your choice
- Whole or chopped peanuts

Blend bananas, pineapple juice, and peanut butter. Spread on lightly buttered bread. For a change, use whole or chopped peanuts with sliced bananas for a filling.

Banana-Pineapple Sandwiches

- Sliced pineapple
- Bananas
- Bread of your choice
- Margarine
- Mayonnaise

Arrange thin slices of the pineapple and banana on bread spread with a light coating of margarine and then mayonnaise.

Cranberry-Banana Sandwiches

- Bread of your choice
- Margarine
- Cranberry sauce or other ripe red berries

- Banana slices
- Pineapple juice

Spread bread lightly with margarine. Cover with bright red cranberry sauce or other ripe red berries. Arrange slices of banana dipped in pineapple juice on top of the berries.

Fruits With Bananas

- Dates or
- Figs or
- Oranges, sliced thinly
- Bananas, sliced

Combine one of these fruits with sliced bananas as a sandwich filling. Suggestive combinations of fruit for fruit cups are:

1. Fresh raspberries, sliced bananas, and sweetened raspberry juice.
2. Diced bananas, oranges, and dates with grape or orange juice.
3. Sliced bananas and cranberry sauce.
4. Delaware grapes, sliced banana, and grape juice.
5. Sugared fresh red currants and sliced banana in currant juice.
6. Chilled fruit cocktail with cubed banana and grape juice. Drain the cocktail before adding the juice.
7. Sliced fresh figs, diced pineapple, diced banana, and a little pineapple juice.


Banana Mayonnaise

- 1 banana
- Cooking oil
- Lemon juice
- Salt
- Yellow food coloring

Use a banana nearly (To page 32)



Bananas grow in various tropical regions. They often are recommended by doctors for diets.

 **ALBERT C. KOPPEL, D.D.S.**

What Is New

in **DENTISTRY**



DO YOU HATE dental appointments? loathe injections? Do you often cancel your appointment on the least pretext? Get with it, man, you are behind the times. With all the devices and methods that jet-age dentistry has to offer, a trip to the dentist can be a joy—another social call—for the patient and for the dentist. Education in dental hygiene is the basis of most of the new equipment and methods, for preventive dentistry has become popular. In a few years there will be no need, barring accident, for anyone to harbor a set of dentures in his otherwise healthy body.

The American Dental Association in cooperation with the United States Department of Health, Education, and Welfare is stressing education as a means of making people so conscious of oral hygiene and dental examinations that cavities will occur in the mouths of only those who are careless.

The first and most important equipment that is newly available for your dentist is a compact, easily movable movie-film projector that can be set up in front of the patient. While the dentist is getting ready for you, is seeing another patient, or is waiting for the technicians to develop your X-ray pictures, you get technicolor instruction on the care of your mouth. There is instruction about proper brushing methods. Children are shown

animated cartoons that make them want to brush regularly. These films explain to you your tooth problems—why a fixed partial denture is better than a removable partial denture, the reason for your pyorrhea, the mysteries of a root-canal filling, or the insidious cavities that make abscesses and cause pain.

On a child's first visit, this self-contained projector sometimes is used in the outer office to acquaint the child with what he will be exposed to, so that he will not be fearful when his turn comes.

Sometimes the dentist may use this modality to train his assistants in new methods and show them how to work effectively. It can be used to teach them how to maintain the latest technics and keep them up to date in dental-preventive maintenance.

In recent years much research has been done in preventive dentistry, and it is now believed that fluoridation is one of the most effective methods to prevent cavities. Toothpaste and drinking water containing fluoride are a boon in the victory over cavities.

When you take your child to the dentist, be sure that an application of fluoride to your child's teeth is made. This important dressing is painless.

Another innovation in dental-patient education for the strictly modern dentist is the phase microscope.



A food deposit from the teeth, when placed under the phase-type microscope seen below, shows the patient the live, moving bacteria that have so recently come from his mouth. This is an effective educational tool that demonstrates the need for brushing the teeth regularly.



Y?

When most of us were in college and used a microscope, we saw bacteria when they were dead, immobile, and stained by dye. Today the dentist or assistant noticing excess food plaque on the teeth from improper cleansing may take time to get a toothpick and remove a small amount of this soft white food debris from the teeth and place it on a microscope slide. In a few minutes the patient can see actual moving spirallike, rod-shaped bacteria squiggling around. Or it may show the cocci, which are little round bunches of germs. When a patient sees this writhing mass of organisms out of a droplet of debris from his own mouth, it has a sobering effect on him and tends to make him brush his teeth more carefully.

Some dentists who have the time and are particularly interested conduct classes for patients who wish to be instructed in oral hygiene. When the patient has brushed thoroughly, the dentist takes any food that may still be around the teeth and shows under the microscope the bacteria that remain after what the patient may consider a thorough brushing.

Often these patients are given red tablets to chew. The color clings to particles of food that have not been removed from the mouth, and the patient can see for him-

self the areas in which he needs more careful cleansing.

Any approved oral-irrigation device aids in thoroughly cleansing the teeth. This appliance when filled with water and turned on squirts a tiny pulsating stream of water between the teeth and dislodges particles of food. Its on-and-off action massages the gum tissues, which all too often are not naturally stimulated by our soft twentieth-century diet.

Another improvement in modern techniques is the panograph X-ray machine. While the patient stands facing the machine, it revolves around his head, and in sixteen seconds a picture is taken of the entire mouth. This coverage gives the dentist considerable information that he might not otherwise be able to collect. This picture of the whole mouth tells him whether all of a child's permanent teeth are present or he has any extra teeth. It reveals the location, position, and number of impacted wisdom teeth.

A panograph X-ray of the teeth eliminates the unpleasantness of having to place films far down and back in the mouth, which process often is disagreeable to patients, especially to those who gag easily. Although the panograph X-ray machine does not completely eliminate the need for the single-picture X-ray photographs, which also are necessary at times, it gives over-all pictures that single films cannot convey.

These machines come in colors—blue, green, cream, and white—and, as with other office equipment, they do not convey to the patients the sterile, hostile look of the all-white dental office.

The dental office with a relaxed atmosphere, soft carpeting, beautiful stereophonic music, and color-coordinated draperies and furniture has a tendency to relax the anxious patient, especially a child, and make the appointment much like a social call.

Assistants in colorful uniforms or pantsuits make for a cheerful climate. The dentist may choose to wear a colored jacket matching the uniforms of the assistants. These clothes may be varied in color, with color for Monday being pink, Tuesday blue, Wednesday yellow, and so on. There may be a rainbow day, when each girl will wear a different color. This plan makes the office casual, and it has a relaxing effect on the fearful patient.

In the operatory (the room in which the dentist works on the patient's teeth) colored equipment matching the drapes and carpeting gives a homey atmosphere. Large picture windows letting the patient view a garden make for a relaxing situation, particularly if the dentist is called out for a few minutes. Some patients ask for their favorite operatory—the one with the tree and the squirrel nest or the one with the view of the landscaped garden. This atmosphere reduces tension and reminds the patient that the dentist is also human.

How does this decorating tie in with preventive dentistry? If a patient loses his fear of dental procedures and can relax, he is likely to come in for regular examinations, and cavities do not have a chance. (To page 23)

family doctor

By H. W. Vollmer, M.D.

Rheumatic-Fever Control

We often hear or read about rheumatic fever and rheumatic heart disease. How do these diseases differ, and what do they have in common? What is the significance of the names?

Rheumatic fever and rheumatic heart disease are both complications resulting from infection caused by some of the dangerous streptococcus germs, such as streptococcus sore throat and tonsillitis. They differ in that they affect different parts of the body. Rheumatic fever is the term used when the joints are affected, causing acute articular rheumatism; rheumatic heart disease is the term used when the heart is affected, which may be a complication resulting from the infection caused by any of the diseases mentioned above; but it is more often a complication of rheumatic fever, hence the term rheumatic heart disease.

Rheumatic heart disease is one of the most crippling diseases of early childhood. If it is not recognized and the proper treatment applied, it may result in early death. Although some patients recover and reach adulthood, they are more or less handicapped. Later in life they may consult a physician for a heart ailment, when it is discovered that the heart ailment is caused by such heart damage as valvular heart disease, a complication of rheumatic fever in early life.

Because of the seriousness of rheumatic heart disease, give even a slight sore throat in children immediate attention. Modern treatment, bed rest, and antibiotics usually cut short the duration of the attack and prevent serious complications. When a child complains of fever and pain in the joints it is high time to be concerned. Even so-called growing pains should not be ignored. They may not be serious, but on the other hand they may be symptoms of rheumatic fever, and parents should seek counsel of a physician. If there is fever and the child complains of vague pains over the heart, put him to bed and place him under a physician's care, because these symptoms are an indication that rheumatic heart disease already has developed.

After examination of recruits for the

first world war, more than half of them were rejected because of the results of rheumatic heart disease, most of which might have been prevented if proper attention had been given in childhood. More than one and one-half times as many men were rejected for this reason than for tuberculosis and the aftermath of measles.

The principal causes of this crippling disease of childhood are lack of prompt attention to early symptoms; improper diet, especially excessive sweets and lack of protective foods; and improper clothing of the body, especially of the legs, which allows unbalancing of the circulation and resultant lowering of resistance to infectious disease.

Recently on a cold morning I observed a mother with her little girl aged about five years and her son aged about ten years on their way to church. The boy had on long trousers and an overcoat, but the little girl had nothing on from the ankle to the groin. This mother in following modern fashion was subjecting her little girl to the possible ravages of rheumatic heart disease. Many mothers are following the same fashion even with babies.

How sad to follow fashion at the expense of life, health, and usefulness in this world! Too often what we need is not more knowledge but the will and wisdom to live by the knowledge we already have.

One city in America has successfully taken steps to conquer rheumatic fever, this heart-damaging childhood disease that may follow strep-throat infection. We congratulate the city of Casper, Wyoming, for their achievement. We quote in full here an article by Staff Reporter Jerry E. Bishop as it appeared in the November 27, 1970, issue of *The Wall Street Journal*:

Wyoming City Uses Simple Methods to End Rheumatic Fever for Over Three Years

"Casper, Wyoming (population 39,145), appears to have conquered rheumatic fever, the dreaded heart-damaging childhood disease that may follow 'strep' throat infection. (The disease develops in one to three per cent of untreated school-agers who are stricken even mildly with strep throat.) Not one case of rheumatic fever has occurred among Casper's 14,000 schoolchildren in more than three years—a period in which scores of cases might

have been expected.

"The key to Casper's success is a ritual performed daily in every elementary classroom in town. Each morning, every teacher asks whether any child in the class has a sore throat or cold. Children who answer yes are sent to a central station in the school where throats are examined. A swab is taken, then sent to the hospital laboratory for culturing and analysis. If the analysis indicates strep, a simple ten-day course of penicillin treatment can cure the infection and prevent rheumatic fever.

"Each child found to have strep throat is sent home with a letter explaining that he cannot return without a doctor's signature attesting that he has started the required treatment."—Reprinted with permission of *The Wall Street Journal*.

Protective Foods

Nutritionists often emphasize the importance of protective foods. What are they and how do they serve the body?

The expression *protective foods* was coined about fifty years ago by Prof. Elmer V. McCollum, who became one of America's leading nutritionists. He did much, along with others, to discover and teach the value of vitamins in the diet. He concluded that the human diet could contribute to what he called "the preservation of the characteristics of youth" if it was richer than average in certain nutrients, namely, calcium and vitamins A and C. He gave the name protective foods to foods rich in these nutrients. Milk, dark-green and deep-yellow fruit and vegetables, citrus fruit, and some other fruits and vegetables that are important for the vitamin C they contain were named by him as outstanding.

Green leafy vegetables may well be known as protective, for they are effective in making good the dietary deficiencies of cereals, tubers, and roots. It is well known that deep-yellow fruit and vegetables and dark-green leaves provide rich stores of vitamin-A value and citrus fruits, tomatoes, and other fruits and vegetables furnish excellent amounts of vitamin C. Needed minerals and good-quality protein are also present in these foods to the extent that they merit the meaningful name protective foods.

Too often these foods are neglected in the average diet because other less nutritious foods are given priority owing to appetite perverted to their flavor. This is especially true among children, who are likely to indulge their appetite with sweets at the expense of wholesome food.

Most families could well increase the use of the protective foods in their diet for the fact that they play a large part in building and maintaining body resistance to infectious diseases and, along with other whole foods, serve to keep the body in buoyant health. ▲

We do not diagnose or treat disease by mail, but answer only general health questions. Address: Family Doctor, LIFE AND HEALTH, 6856 Eastern Avenue NW., Washington, D.C. 20012. Enclose stamped, addressed envelope.

RHEUMATOID ARTHRITIS

(From page 9)

in physical and occupational therapy gives him an opportunity to compare progress with them and learn to understand the disease better. If a patient can see progress in his state, others also expect progress in their state.

What Medicine? There is no medicine that cures arthritis. Throughout history numerous medicines have been tried.

To relieve symptoms of pain, the salicylates are the least expensive, and a moderate dose of them several times a day seems to give relief. The more expensive medicines such as butazolidin and Indocin may be helpful in some cases.

Injections of gold salts in fairly new cases over a period of a year or two at one-week, two-week, or three-week intervals, can create a reaction that produces improvement not only of joint and muscle function but also of the blood and the general condition. The only drawback is that some people are allergic to the gold-salts injections and may get some side effects that have to be watched for by the nurse or doctor.

Cortisone, one of the hormones from the suprarenal gland, has been used since 1950 in the treatment of rheumatoid arthritis. Its antiinflammatory effect was detected by Drs. Philip Showalter Hench and Robert Lewis Kendall, of the Mayo Clinic, in the 1940's.

In the beginning, cortisone was used to such a degree that it created many side effects. Since then it has been given with more caution in most cases, and its limited use seems to be beneficial and harmless. Cortisone can be given either by mouth or by injection to stimulate the body's defense mechanism. It can also be injected locally into certain inflamed parts of the body, as in bursitis, peritendinitis, and synovitis of the joints.

The value of the different kinds of medicine has been disputed, because many cases of rheumatoid arthritis are of only temporary nature and sometimes disappear after simultaneous treatment of such other diseases as colitis and chronic infection, as found in the gall bladder, appendix, tonsils, and acute granulomas of the teeth.

Can Diet Help? Diet for the rheumatoid-arthritis patient is chosen according to his condition. Doctors often find that such a patient has no stomach acid and therefore has difficulty in digesting heavy protein. A light diet with plenty of fruit and vegetables is preferred for him. On account of medication the patient develops a high-acid condition of the stomach and stomach ulcers in some cases. A strict diet combined with antacid medication is indicated and helpful.

As in other inflammatory diseases, vitamins usually are needed in overdose. Rheumatoid arthritis is a disease of connective tissue, and ascorbic acid is a vitamin that improves the metabolism and regeneration of this tissue. There is special need for this vitamin in the body of the rheumatoid patient. Other vitamins, such as A, D, and the B complex, should be given in surplus, either through the diet or in medication.

When Is Surgery Required? It used to be that orthopedic surgery was the last resort in the treatment of rheumatoid arthritis, but today orthopedic surgeons believe that if surgery is to be effective it must be performed at an early stage of arthritis.

Thus, removal of the synovial capsule of the knee joint should be performed before damage is done to the cartilage. Correction of the finger joint should be taken care of before complete dislocation and wear and tear have made the possibility of a good result difficult.

However, metal prosthesis in the hip and knee joints at a later state has been able to create new ambulation ability, and the patients often can throw away braces, crutches, and wheel chair.

It is hoped that enough attention will be paid to rheumatoid arthritis by the

medical profession that every case can be cared for by specialists from the beginning, because medical progress established through research and experience may benefit the patients.

Acute diagnostic hospital stay cannot solve the problems. For years ambulatory treatment and watchcare of the patient's symptoms are needed. Often the home situation is difficult, and the patient's physical and emotional state suffers from it. In such cases sanitariums and health resorts are helpful, creating a new atmosphere and new possibilities of helpful rehabilitation.

Even though an arthritic patient is so much improved that he is called cured, there is the possibility that in future years his arthritic problems will appear again. Such a person must always be aware of the danger in which he is living, and must keep in touch with his doctor to be rechecked for his problems.

If a patient is rehabilitated from rheumatoid arthritis and is able to carry on a job, he is in much better shape than if he were sent to a nursing home and given social security disability, because inactivity is the worst enemy of anyone.

If men are to live successfully, they must have periods of activity balanced with periods of relaxation. This rhythmic pattern gives everybody an opportunity to live to his maximum capacity. Daily chores should be so planned that there is time left to pursue other lines of action as new skill broadens experience and helps the patient to feel better.

It is good for anyone to refresh himself with some pastime diversion and other means of enjoyment. Recreation should include moderate sports, crafts, conversation, games, and hobbies. Rheumatoid patients' work should be at the right pace and in the right position so that there is little room for pain and fatigue to interfere.

Interesting sports are recommended, not only for the patient to act as a fan but also to take part in easy and moderate activity, avoiding stressful and rugged programs. The constructive and recreational part of life develops not only tolerance and individual growth but also happiness.

Rehabilitation of the arthritic person is treatment of the whole man, including mental, physical, social, psychological, and vocational aspects.

Rheumatoid-arthritis patients should feel assured that they are not standing at the beginning of a road ending in hopelessness and despair, but may look forward to the future with the possibility of carrying on life nearly as usual. Statistics show that before rehabilitation 1,500 arthritic people earned \$312,000 a year, but afterward they earned \$2.6 million a year. The slogan should be Stop arthritis before it stops you. ▲

COMING Next Month

● YOUR BREAD

By JOHN H. DAVIS

The nutrition that goes into the loaf of bread you serve at your family table may make the difference between health and illness.

● YOUR GALL BLADDER

By CASIMIR A. DOMZ, M.D.

When your doctor discovers that you have gall-bladder disease, he is sure it is time for the organ to come out, for the sake of health.

● WATER MAGIC

By MARY NOBLE, R.P.T.

Water has properties that make it of great help in the treatment of disease and in keeping well. Its effect on circulation is amazing.

● REGULAR FEATURES

HOME NURSING

MOTHER'S COUNSELOR

GOLDEN AGE

mother's counselor

By Marian Strickland, M.D.

LAST MONTH THE yellow newborn was our subject. A newborn baby can be the victim of many conditions that may affect his future life. As time marches on, more is being discovered on cause and effect of some of the conditions of the neonate (newly born child). The condition that has become well known in the past few years called hyaline membrane disease is somewhat of a mystery. In the November 13, 1970, issue of *Medical World News* there was an article entitled "Battling the Hyaline Membrane." Although it was stated that the

Hyaline Membrane Disease

disease is still a mystery, the reassuring words "but more victims can now be saved" give hope for the small sufferers of this strange ailment.

The term *respiratory distress syndrome* refers to the condition that develops in the newborn, most often in the premature infant. The baby may become cyanotic (blue in color), begin breathing rapidly and shallowly, and reveal grossly apparent distress. The fulminant (coming on suddenly with great severity) form of respiratory distress syndrome is the condition known as hyaline membrane disease.

Several causes of this condition have been suggested, and there are differences of opinion among pediatricians most interested in the problem from Kentucky to Canada. In the *Medical World News* issue of 1971 dealing with obstetrics and gynecology, Dr. Louis Gluck, professor of pediatrics and chief of perinatal medicine, University of California School of Medicine, said that "more than 50 different pathogeneses have been suggested for this syndrome

along with a number of therapeutic schemes. And yet the clues to the etiology of RDS [respiratory distress syndrome] seem clear enough from the pathophysiology: RDS affects prematurely born infants almost entirely; it is characterized by progressive collapse of the lung when the infant exhales, due to a lack of alveolar [pertaining to lung air cells] stability. Since the disease is confined almost completely to premature infants, a developmental problem is implicit and predictable in utero."

Several physicians in Florida noticed that hyaline membrane disease is more frequent in boy than girl premature babies. They suggested that if aqueous estrogen is injected promptly after birth it might provide the possible missing obstacle to penetration of lung air sacs by oxygen. Other researchers have forced into the lungs of babies afflicted with hyaline membrane disease sprays containing surface-tension-reducing substances, but no beneficial results were observed. They had theorized that there was too little of a tension-reducing substance called a surfactant that made the air sacs easier to inflate when it was present in needed amounts.

All these are theories, as the scientists declared in one sentence: "The etiology [investigation of causes] of HMD is still a black box, and we're playing in the dark."

They are striving to learn more.

Hyaline membranes have never been found at birth, even though the disease begins then. It takes six to eight or more hours for the condition to appear. When it develops, the lungs, on examination, have areas of enlarged air ducts lined

with the membrane, which is made up of fibrin, plasma proteins, and the like. There are areas of collapsed lung tissue, which condition progresses in degree, and the baby does not get enough air into the lungs to continue life.

"Lungs from infants who have died of hyaline membrane disease show diminished amounts of lecithin as compared to normal lung. Present in every cell in the body, surface-active lecithin has become specialized in the lung."—Obstetrics and Gynecology issue, *Medical World News*, 1971, p. 94.

This fact has led to the possibility of predicting whether a fetal lung will be mature enough to withstand the possibility of hyaline membrane disease. Without going into the more intricate explanation of all the factors responsible for lecithin synthesis and how it reacts to lack of oxygen, lowered temperature, and increase in acids, with choline incorporation, suffice it to say that the amniotic fluid (in which the baby is immersed) can be monitored for phospholipids. The lung is a secretory organ, and it contributes phospholipids to the amniotic fluid.

"We know that while lecithin concentrations rise throughout gestation, they show an abrupt increase at about 35-36 weeks."—*Ibid.*

By contrast, sphingomyelin concentrations change little during pregnancy, and they later may decline. Lecithin/sphingomyelin ratios can help in determining how mature the fetal lung is.

These methods doubtless would not be available in small communities.

Techniques for treating babies with hyaline membrane disease can save most infants that have reached at least 31 weeks of gestation. Younger fetuses have a poorer chance, as do those whose weight is less than 1,500 grams, or less than about 3.3 pounds. The chief supportive procedures used in an intensive-care facility include intravenous fluids with glucose, water, and sodium bicarbonate. Incubators are temperature- and oxygen regulated, and the baby's temperature is monitored. Chest X-ray photographs are taken at intervals, and blood studies are performed serially. There is some controversy over the use of mechanical respirators.

Figures as to the rate of mortality vary, but evidently with intensive treatment they are about 1.6 per thousand hyaline membrane disease babies. With no intensive-care unit available, the rate would be double that or more.

It is not easy to work with tiny babies, especially prematures, but doctors who specialize in this field are doing their best to cut down the mortality rate. Doubtless the conditions that threaten life in a newborn, especially in the premature, will one day be solved as to cause and will receive more satisfactory treatment. ▲

Mother's Masterpiece

By JANE MERCHANT

Having vases in generous array,
She prefers odd containers to hold
Her flowers. Stone crocks will display
Constellations of asters, an old
Milk jug will foam over with Queen
Anne's lace, and pill bottles will do
Well with pansies. All these I have seen,
But this is too good to be true:
Wee blossoms of blue-eyed grass
In a tiny eyecup of blue glass.

Address questions to *Mother's Counselor*, *LIFE AND HEALTH*, 6856 Eastern Avenue NW., Washington, D.C. 20012. Enclose a stamped, addressed envelope for reply.

NEW IN DENTISTRY?

(From page 19)

Another method that relieves the patient of his fear is the new intravenous premedication that can be given if he needs extensive work. By doing all tooth preparation under such sedation, which permits the patient to know what is going on even though he is senseless to the actual process, his visits may be limited to one or two, and he will remember no discomfort. Although feeling drowsy and relaxed, he is alert enough to obey commands to open or close his mouth. Chances are that next day he will remember almost nothing of what went on during the two or three hours he relaxed in a comfortable contour chair.

The new vacu-dent suction device eliminates discomfort during tooth preparation for even small cavities. For years dentists have used suction to remove saliva and blood from the mouth during tooth removal and other kinds of dental surgery. The new vacu-dent for every-time use has its particular application when the teeth are reduced or prepared for insertion of dental restorations.

With the new accelerated rotary cutting instruments that reduce tooth substance rapidly, the tooth could become warm quickly. An attachment to pour tepid water onto the tooth as the work is being done cools the area and permits the dentist to work with improved vision and without interruption.

However, all this pouring of water into the mouth presents problems, and so a mouth-emptying device was invented. A high-volume suction machine is available whereby the spray and the water being poured into the mouth are drawn out along with any debris loosened during the drilling. The suction is so firm that particles of worn-out restoration or broken enamel are easily whisked out of the mouth before they can accumulate.

This device conserves the dentist's time, for he does not have to stop for the patient to spit. The patient is more comfortable during this process, because the tooth is kept cool. Another advantage is that the time for the patient in the chair is cut down and the dentist can do more work at one sitting. The patient will not have to return as many times. These vacuum machines can easily be installed in the basement or another central area, from which they operate to each room.

Still another new development in dentistry is in gold crowns. Formerly they came in gold or in gold with plastic facings. These crowns may tend to wear somewhat, especially in some mouths. The latest development is the porcelain-fused-to-gold crown. This combination has not been possible to achieve until recently, because gold melts at a much lower



BUILDING FOR ETERNITY

By PAULINE CHADWELL

It is the teacher's heart that strives
To build the best from children's lives
Entrusted to her daily care,
The lamp of learning hers to share.

It is this reverence for lives
On which her daily purpose thrives
To guide each child to know his worth,
His rightful heritage from birth.

point than porcelain does. Now dental metallurgists have discovered how to raise the fusing point of the gold so that the two can be fused together. This process results in a much better fit and natural appearance because of the translucency and light-reflecting properties of porcelain.

These porcelain-to-gold crowns require greater skill and are more time consuming to construct than older crowns were, therefore they cost a bit more, but they are infinitely better in appearance and sturdiness. Porcelain alone can break, whereas porcelain fused to gold seldom breaks.

Although new strides in preventive dentistry are great, without the cooperation of you, the patient, no amount of new devices, instruments, or techniques can keep you from having trouble with your teeth. Unless you resolve to see your dentist regularly to detect trouble before it starts, the progress in dental science will be of no benefit to you. One State in the Union realizes this fact, and in an attempt to educate its citizens to be dentally alert a solution has been devised that is becoming quite popular.

The arrangement actually is a dental prepayment plan, but in effect it is also an educational program to do away with cavities. It is devised to reward the patient for seeking regular dental examina-

tions and having needed work done immediately. In the first year of eligibility, this service pays 70 per cent of all dental fees. The second year if the patient meets the requirements by making one yearly visit to the dentist and having needed work done, the payment is increased to 80 per cent. The portion goes up to 90 per cent the third year, and eventually the patient is paying no dental bills at all, simply by making his regular visit to the dentist and having any necessary work taken care of.

Will this arrangement put the dentist out of business eventually? Not at all. If everyone came for dental examinations regularly, there would not be enough dentists to go around. Then, too, the dentist's work would be made considerably easier if there were not so many problem mouths.

Such a preventive program is set in motion mainly to make people conscious of the importance of their teeth to good health. Preventive dentistry should rank right along with no-smoking campaigns, the fight against tuberculosis, and research on cancer. Fortunately, this idea is on the way to being accomplished. If everyone cooperates, tooth decay, oral disease, and false teeth soon will be antiquated.

Just a word of caution. Do not expect that the next time you walk into your dentist's office you will find all this equipment and all the new technics being used. The equipment is costly, and some of the new technics are too new to be in common practice.

Just remember that the biggest responsibility rests with you, the patient. No new ideas, no progress, can succeed without your knowledge of patient cooperation. You can practice preventive dentistry in your home without any gadgets, if you will, and a trip to your dentist twice a year should do the rest. ▲



Addicted Newborn

Accompanying the alarming increase of narcotic addiction in adults has been the increase in the numbers of passively addicted newborn infants, according to "Pediatric Nursing Currents," a publication of Ross Laboratories. Usually seen only in large municipal hospitals in the past, withdrawal syndrome is now appearing among infants born in private hospitals to mothers from all walks of life. Failure to diagnose a newborn's addiction and begin treatment immediately, the report continued, may result in the death of the infant.

"Georgia's Health" reported this fact. ▲

family fireside

By Harold Shryock, M.D.
Professor of Anatomy
Loma Linda University School of Medicine

SOMEONE WITH A statistical bent has said that about one fourth of the cases of disagreement between husband and wife in which serious tension develops result from misunderstanding over money. But handling money is involved in so many of life's activities that in a given case it is hard to know whether financial problems are the cause of the difficulty or merely a part of the total picture.

It is not surprising that money matters cause trouble between husbands and wives. Money is only a medium of exchange, but control of money within the

left over. Usually within about a week she tells me that her money is all gone, and she begs appealingly for more money to last through the remainder of the month. We are in debt now, and the debt is becoming greater.

I would be interested to know your wife's side of the story, but your statement that your indebtedness is becoming greater month by month surely indicates that your problem is serious. In other words, you are living beyond your means. The only way that a family can succeed financially is to follow some plan to which both husband and wife agree that keeps their expenditures within the limit of their income. They dare not spend more than they make.

I assume that both you and your wife are responsible for your present predicament. Probably she has not had the background of experience that enables her to handle money wisely. Do not blame her for this lack, for she needs help rather than blame. Probably you have expected her to carry more responsibility in the management of the household affairs

than she is actually capable of carrying.

I recommend that you work together more closely than you have been doing in paying the bills related to the home and in making purchases. This does not mean that you should do the grocery shopping instead of your wife, but it does mean that the two of you should sit down together and plan your use of money in harmony with a firm schedule of expenditure. If it antagonizes your wife for you to intrude into the area where she has been in charge, I advise that you patronize a financial consultant and ask him to work out with the two of you a plan for spending that comes safely within your family income.

Once such a plan is developed, it is imperative that you allow no exceptions. During the time your wife is becoming accustomed to the new plan it may be best for you to make the specified amount of money available to her by the week rather than by the month. Let it be clearly agreed that there will be no occasions for you to spend money beyond what is provided in your financial plan.

Should Incomes Be Pooled?

My husband and I are employed, and we disagree on the best way for handling the money we earn. He thinks our incomes should be pooled in order that all our bills may be paid from a common fund. He is a little vague as to what he thinks should be done with the money left over. I think that our incomes should be kept separate and that each of us should agree to care for certain of the expenses. Then whatever is left over of my money after my share of the expenses is paid should be used as I please, and the same for him.

I think it is proper for the incomes of husband and wife to be pooled so that expenses can be paid out of a common fund, provided both parties have an equal voice in determining what is to be done with the leftover money.

The weakness of your husband's proposal is that he probably expects you to surrender control of the surplus funds. I would favor the plan by which you each agree to handle certain of the family expenses out of the funds you earn, with no questions asked as to how you will handle the money that remains.

For major expenditures such as for new furniture or a new car, there will need to be a mutual agreement as to what proportion of the cost you will each contribute from your own funds.

There is no rule for the handling of money that will apply perfectly in every case. Each husband and wife must determine their policy in this matter and then keep faith in carrying it out. The important thing is that there be agreement about financial responsibilities that is acceptable to both.

Dollars and Sense

family means control of purchases, of the standard of living, and of the family's security.

It is natural for people to want things. The wife may want a new piece of furniture, the husband a new suit. If there is not enough money to buy both, there develops a contest—even though it may be silent—as to which one has sufficient control of family funds to obtain what he wants. Thus money becomes a symbol of control, so that the one who is in charge of the family money is really in charge of the family affairs.

We speak of marriage as a partnership, and so it should be, but in many marriages elements of selfishness break through the partnership ideal when it comes to handling money.

A Desire for Spending

My wife enjoys spending money. It is almost a compulsion with her, and she admits that one week is about as long as she has ever been able to keep money that comes under her control. We have an agreement by which she is responsible for paying all the home expenses. At the beginning of each month I write her a check for an amount sufficient to pay all of these expenses and still have a little



THE PICNIC TREE

By LOUISE DARCY

Day of rain.
A strange bird crying
In the copper beech.
One of the children said,
"Let's call it the picnic tree,"
And when we walked beneath the branches
We looked up and said, "The picnic tree."
The children now are grown and gone,
And rain is falling on the copper roof.
Soon the close-clustered burnished leaves will fall,
But in the spring the waking boughs will start
Once more the growth of woven summer shade.
Then the great branches will proclaim to me
The cherished name of childhood,
The picnic tree.

Send your questions on family problems to: Family Fireside, LIFE AND HEALTH, 6856 Eastern Avenue NW., Washington, D.C. 20012. Enclose stamped, addressed envelope for your reply.

The Wife as Manager

It was agreed when my husband and I were first married that he would turn his pay checks over to me and that I would be our family financial manager. He has been quite content with this arrangement for the ten years of our marriage, and gives me credit for being a good manager. I have been careful to set up a certain amount of money each month for him to use for his expenses. Recently he developed a hobby that requires expensive equipment. I do not object to his having a hobby, but our income is not large enough to pay our bills and buy the things he now wants to have. Last month I agreed to let him handle the money, and the result is that he bought some of the things he desires and left some of the bills unpaid. Now what do we do?

If your statement gives an accurate description of your situation, I must say that your husband has acted immaturely. I would also say that it was not wise for him to surrender his responsibility in matters of finance throughout the ten years of your marriage. Even though you have been a good manager, he as head of the house should have been interested enough to become involved in helping you plan the way your funds should be used. Had you followed such a practice, he would be more aware of the realities of balancing the family budget.

It is perfectly all right for either husband or wife to serve as the family money manager, provided the policies that determine the use of family money are worked out cooperatively, with husband and wife each having a proper influence in determining them. Family money should be considered as shared, not his money or her money.

Bills must have priority. If your husband cannot see this necessity, then let him be the one to deal with the bill collector.

I suggest that the two of you spend a few evenings reviewing your financial procedures of the past few months and working out an agreement for the future. If your husband wants to be the manager from now on, let him do it, but make sure that you do your part to work within the outlines of your agreement. ▲

☆ ☆ ☆

CAMPING CAN BE GREAT

(From page 11)

mean that you will not run into some noisy litterbugging people in campsites, but they are not the usual.

3. Camping tests ingenuity in preparing food for the family. It offers two-, three-, or four-day trips to points of in-



ONE BIRCH

By ELAINE V. EMANS

This oak wood where the sniffing dog
And I go tramping over log,
Under the loopings of grapevine,
Around varieties of pine,
Through blackberry and hazelnut,
Is not the type of grove to shut
Out newcomers. Yet careful search
Reveals a single paper birch.

One white birch in a darksome wood!

Still, were there five, ten, twenty, could
I, coming on them suddenly
Along the rabbits' runway, see
The bark in all its exquisite
Detail, and how the young boughs fit
Into the picture, running down
In their white-speckled, satiny brown?

Could twenty stand with the elfin grace
One birch does in this tangled place?

terest in your own State. The shortest journey is enjoyable if it is well planned, with every meal arranged for before you start out. Plan en-route entertainment for the children by lining up car games of all varieties.

If you are serious about becoming a camper, you will want to subscribe to a camping magazine and buy a camper's atlas (about \$5). Your local bookstore can assist you in this purchase. There are suggestions in this atlas for every area in camping, from food recipes to campsite directories. There are eleven thousand campsites in this country and Canada.

"Kampgrounds of America"—KOA—are well-equipped campsites, and their directors are glad to furnish would-be campers with a list of their locations. Write to KOA, Inc., Box 1138-C, Billings, Montana 59103.

There are certain amenities that every camper should observe. Never litter.

Carry plastic bags to bring away your empty cans and other indestructible waste. Use only places provided to dispose of trash. Do not allow children and dogs to wander at will over campgrounds. Such wandering is dangerous for them and annoying to other campers. Keep your premises neat and quiet. Loud talking at late hours may disturb your neighbors.

Be willing to pay the directors of the campsite for the conveniences you use—clean restrooms, water and electrical hookups, grills, firewood, and the like.

The beginning camper, whether backpacking or using a motorized recreational vehicle, should not fail to acquaint himself with the advantages and problems of his new interest.

A trip should begin with planning—destination, equipment, clothes, meals, pets, packing, trailer towing, a cookbook for easily prepared meals, ways to cope with harmful insects, ways to recognize poisonous plants, what to do in the event of rain, and how to set up and break camp. Estimate the cost of gasoline, oil, food, campsite, laundry, and incidentals.

Although there are numbers of books available on the subject of planning a camping trip, there is nothing else that teaches quite so well as experience. However, you can be fairly certain that your trip will cost only one third the amount you would spend on the motel-restaurant method.

It should be remembered that conservation is a companion of camping. When man was given the privilege of using the earth, he was given the responsibility for tending it. So do your part to preserve the natural beauty of the country through which you pass or wherever you set up camp.

Vandalism and violation of rules or laws detract from the esthetic environment of camping areas. When 50 million people use camping facilities, only through strict compliance with regulatory campground rules can all of them have enjoyable recreation in a natural environment. If all campers accept responsibility for their behavior, a desirable physical and social atmosphere in campgrounds can be maintained.

In our day of short working hours and long weekends, we have more time to ourselves. More people are retiring while they are still young enough to travel. We have the highest standard of living ever known in America. We have interstate highways that facilitate travel and offer great mobility.

If you are at all inclined toward camping with your family, it will be to your advantage to inform yourself about this splendid and commendable opportunity for healthful recreation. Camping and conservation can restore tranquillity and teach something magnificent about the harmony of nature. ▲

golden age

By O. S. Parrett, M.D.

IF YOU HAVE A good back you may think this article is not for you. However, back pain can strike at any age and from many causes. Low back pain can pose a problem that may be baffling even to such specialists as orthopedists, neurologists or neurosurgeons, X-ray specialists, and perhaps psychiatrists, who are entering most fields of medicine.

I am thinking of an elderly and friendly neighbor who recently retired in our valley. I had known this man, aged eighty, before he moved here, when I attended his former wife in her last illness. He had

Back Pain

bought an acre next to the home of another friendly neighbor.

By friendly I mean just that, for the line between their two properties was so poorly drawn that the new man, thinking he was digging a well on his own property, discovered that it was on his friend's place. Did they quarrel over the well? Instead of fussing over the well, they each put a pump in the well, which furnished water in abundance for both of their little garden farms. In fact, the virgin soil so recently cleared grew carrots, cabbages, stalks of sweet corn fifteen feet high, and good Kentucky wonder beans. This man shared his giant-sized cabbage with me, because I was late with my garden on account of our car accident.

One day the new neighbor came to visit me. He was fairly dragging both legs between crutches. Pains in his back and one leg were so bad that he told me he would prefer not to live rather than continue in such pain. He asked whether I could help him. I said I would try.

Could it be arthritis, so common among the elderly? I asked some questions, for the history is most important in arriving at a diagnosis. A year before, he had had backache enough to send him to a Veterans Administration hospital. His back had been X-rayed, and nothing was said about arthritis. I was sure that had the

doctors found arthritis, which in most cases X-ray photographs show readily, they would have said, Sorry, but you will have to live with a painful back the rest of your days. Having observed arthritis for fifty years, I could not recall having seen an arthritis patient dragging himself around with crutches and unbearable pain.

This bit of history and the fact that this man had been bending his back sharply while attending to his low-growing plants led me to a diagnosis of a ruptured and herniated intervertebral disk.

I well remembered a time when, some years before, I was visiting the Mayo Clinic in Rochester, Minnesota. Herniated-disk operations were relatively new, and I entered the amphitheater where a disk operation was going on. I found myself the only visiting doctor in the room. I was invited by the surgeon, a Dr. Love, who was doing all the disk operations for the clinic, to step down and observe the operation at close range. Dr. Love told me an interesting story.

He said that two days before, while shopping downtown, he had seen this patient on the sidewalk. He observed him lifting himself along, limping with one leg and then with a twist of his pelvis begin limping on the other leg. He said to himself, I believe that man has a herniated disk and I will be seeing him in the clinic.

Sure enough, the next day a staff doctor called down the hall and asked him to come into his office, adding, "I think I have a case for you."

"Yes," replied Dr. Love, "I think I saw



BIRTHDAY LADY

By JANE MERCHANT

Though her hair is silver, her laughter is gold,
And her eyes are merry and keen.
She says with a twinkle, "I'm only as old
As the rainbows I have seen."

this man downtown yesterday." Sure enough, it was the same man. His shifting of the pelvis enabled him to throw the protruding piece of disk to the other side, thus resting first one leg and then the other.

As Dr. Love proceeded to find and remove the offending protrusion he remarked, "We will send this man home well in about a week."

I was afraid that my crippled neighbor might not be taken seriously if he returned to the same hospital for treatment. I wrote for an appointment, urging that a team of three men see this patient and look for a herniated disk—a neurosurgeon, an orthopedist, and an X-ray specialist, who by tilting the table could watch for a distorted shadow from a bubble like an opaque drop of oil in the spinal canal.

In some medical centers an additional study is being made using an electromyogram, much the same as an electrocardiogram. Not every center is equipped for doing this study.

The man was entered in the same hospital soon after, and they spent days checking him, even looking for a possible malignant spine. Just before I started for Florida on vacation this man's wife called me by telephone and said they called a specialist from San Francisco who had found and removed the broken disk, which was badly fragmented. After the operation the man was free from pain and soon would be released to go home.

I was happy to know that this good man could go into his garden and enjoy it. Such a result makes the arduous work of a doctor rewarding.

What about young people? They too can suffer a herniated disk. Several years ago the trampoline craze was going strong in the schools. It did not last long, possibly because of the number of people who hurt their backs cavorting on these feeders for the orthopedists.

Recently a nephew of mine was thrown from his car in an accident. He had surgery, and is now well from a ruptured disk.

While I was practicing medicine in Pasadena, California, a patient came to me with severe backache. Suspecting that he might have a ruptured disk, I sent him to the Los Angeles County General Hospital, where the doctors found a ruptured disk and removed it.

You have heard of lumbago. Pitching a forkful of hay over one shoulder, you suddenly find that you cannot move.

I was called by another neighbor's wife, who said her husband was on the floor in pain and she was unable to get him into bed. I found him flat on his back. Trying to move him the least bit resulted in his screaming with pain. After a hypodermic injection, we managed to return him to bed, where he stayed for two days and gradually improved as his muscle cramp

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.

subsided. Hot applications or hot liniment and massage may hasten recovery from such an injury.

The late G. Mosser Taylor, director of orthopedics at White Memorial Hospital in Los Angeles, once showed several of us doctors a little trick he found useful in helping some low-back muscle-spasm patients, one that we might try in cases of lumbago resulting from a twisting movement in working or playing. Placing the patient on the left side with the left leg straight and the right leg half drawn up and resting on the left leg, he pushed on the shoulder and pulled on the hip with a sort of twisting motion, using moderate energy. Then he reversed, and pulled on the shoulder and pushed on the hip. Next he turned the patient to the right side and went through the same maneuver.

I always tried this in cases of lumbago. I would listen for a little snap, apparently where the vertebra had moved ever so slightly, and this little twist would recover it. If I heard nothing, this treatment seldom helped at all. But in a few cases the results were spectacular.

Did you ever hear someone say in referring to a certain person, "He is on a toboggan"? I tried tobogganing once, years ago at Big Pines resort in the mountains above San Bernardino, California. Wearing a Taylor brace for six months made a big impression on my mind.

I was seated between my two youngsters with my back bent, hanging onto the toboggan. The slide was icy and had several pitfalls. We hit one, and went sprawling onto the ice. I rode home with someone else driving the car, holding my hands under me to brace me up to avoid the bumps of the car.

I ended up at White Memorial Hospital. Both my friend Dr. Walter Macpherson and an X-ray man, said to be one of the best, studied the X-rays, but could never come up with just what had happened to my spine.

I learned the hard way that ice can be very hard. I have a good back, but the word *toboggan* still rings a bell.

Did I have a herniated disk? This accident happened before they had been discovered, and so I will never know. ▲



THE SNAKES IN YOUR LIFE

(From page 10)

and blood from under the skin and elsewhere may begin to appear. Swelling within the lungs has occurred in fatal cases. Pain at the point of inoculation is a common symptom.

Poisoning by the coral snake is less severe, but this poison affects the nerves and interferes with nerve function. There

may be muscle-group contraction or twitching, thickening of the tongue, slurring of speech, drowsiness, spasm, numbness, and unconsciousness.

Because active outdoor people can be subjected to envenomation by poisonous reptiles almost anywhere in the world, it is well for everyone to know what to do and why poisoning is so managed. Here is instruction in regard to snake bite:

1. Be aware that poisonous snakes can be in practically any area, so wear protective clothing—have body and especially the legs covered. About 98 per cent of snake bites occur below the knee and below the elbow, hence boots and gloves are recommended for hikers. Be especially careful in reaching into any crevice or other area that you cannot see clearly, and when walking on rocks or other places where snakes may be sunning themselves or in the heat of the day may be lying in the shade.

2. If you are bitten, quickly apply a tourniquet between the bite and the heart to prevent the venom from getting into general circulation. Every twenty to thirty minutes the tourniquet must be loosened for a few moments to let in new blood and let out the previously shut-off blood lest you develop gangrene of the affected part.

3. Make a cross cut over the area of the snake bite deep enough to reach the venom (one-fourth inch) and apply suction. If no suction cup is available it is safe for the first-aid helper to suck out the oozing area by mouth, provided the first-aid helper has no open sores in his mouth. Continue suction at least thirty minutes.

4. Get the bitten victim to medical aid as quickly as possible. It is imperative, however, that he be kept as quiet as possible, for any hurry on his part will speed up circulation and result in rapid distribution of the poison all over his body.

5. If the right antivenin is available administer it. It is best done by a doctor, however, because complicating factors may arise from such medicaments. Since there may be severe blood destruction, the doctor may find it necessary also to transfuse fresh blood into the victim. The adrenal steroids seem to be of value in such cases.

6. If a physician is not available apply ice to the area below the tourniquet in the hope that it will slow up absorption of the poison. Later use hot packs soaked in Epsom salts.

Each of us knows the possible chance of being bitten by a venomous snake by the extent to which he is exposed to the whereabouts of such snakes. He can protect himself as indicated in this article. If he is bitten, there is something he can do. Remember: the remarkably low death rate from snake poisoning no doubt can be further reduced by following the procedures given in this article. ▲

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home nursing

By

Mary Catherine Noble, R.N., R.P.T.

IT SEEMS THAT everybody up our way is sick," Mrs. Not-Sick-Not-Well sighed. "My neighbor is sick, but she got her husband to bring me in. I'm not really sick, but this pain in my face keeps me from getting my fall housecleaning done, and fall is nearly over."

How important being really well is to enjoyment! If a person is not well he is unable to perform efficiently, just as this housewife who normally takes pride in her well-kept house finds it difficult to wash her windows and keep her house as she is accustomed to doing. Thousands

Thankful and Vigorous Hearts

upon thousands of dollars are spent yearly in an effort to stay well. No more sensitive nerve is touched by Madison Avenue than the one pertaining to health. To be fit, really fit, and to maintain that fitness is the goal of everyone. Some people work diligently at keeping fit. Others aspire to be fit but do not find time to attend to the body's need for exercise, sleep, and food. They fail to fulfill one or all of these basic needs. Somehow we all think we can cut corners on Mother Nature and she will overlook our habit of shortchanging her. In reality, we are shortchanging ourselves.

People who achieve much and still maintain good health learn sooner or later to utilize time in such a way that they have balance in their living habits. They become the master of time, not the slave of the fleeting minutes.

When we say something is in balance, we mean that there is a state of equilibrium, or equipoise. If we look up the word *equilibrium* in the dictionary we will find this interesting example: "Work, play and rest should balance each other."

A state of equilibrium is essential for

life. One of the first concepts we learn in the study of simple physiology—the science that has to do with the function of the body—is that the healthy body maintains itself in a state of equilibrium, called *homeostasis*. When this balance is disturbed, we do not feel well or we may become seriously ill.

Four major concepts about the body as a whole have been established:

1. Body structures and functions are many and diverse, but all of them are part of a unit, an integrated whole. This whole being has but one goal—survival, survival of itself and of the human species. Self-preservation is one of the first responses of mankind. We hear much about survival, even to the suggestion of leaving old mother earth for some faraway planet, but the fact is that some other planet may not be kind to human nature.

2. In order for a person to survive, it is essential that body balance, the equilibrium within the body itself, be maintained. The environment around each body cell is ever changing, yet it must be kept relatively constant. Keeping it so is the function of homeostasis.

3. In order for a person to survive, energy must be released. A certain minimal amount of energy is necessary for the heart to beat, the lungs to work, and the brain to think (if not to think, to send the signals that automatically take care of the workings of the being).

4. In order for a person to survive, sub-



TOGETHERNESS

By BULA L. DEEB

Togetheress doubles our joy
And cuts in half
Our pain and sorrow.

stances within the body must continually move from one place to another.

Survival may be pictured as a pyramid. The three basic foundation stones are energy release, movement of materials, and integration. Resting on these stones is the larger stone homeostasis, and the pyramid survival rises from them all.

For a person to become master of time and health involves the cerebral cortex, that outside layer of the brain that has to do with all kinds of mental processes—thinking, willing, using the memory, exercising the emotions, experiencing sensations, using voluntary control of movement, having consciousness. All these mental activities result from nerve impulses originating in this part of the brain. Minute electrical currents trigger the responses that the body makes to stimuli. If you are cold, hot, or hurt, the sorting out and interpretation of sensations occur here. If something heavy rests on your foot, the "pressure" signal in the cortex flashes on. Seeing, smelling, tasting, and hearing feed information into this smallest of data-processing centers. The cortex not only registers all these separate sensations but also makes comparisons and judgments and integrates single sensations into meaningful concepts. For example, your hand may be touching an object. It may be small, smooth, and light. All this information is fed into the cortex, and then you come up with a general concept—a small, smooth stone.

The cortex is involved in the control of voluntary movements of the body, making possible the desired movement or the slowing of movement of a body part, by its action on certain parts of the spinal cord. It is responsible for learning, memory, changing concepts into words, emotions, insight, foresight, personality traits, consciousness, and other mental or association functions.

In essence we may say that where we really live is in the cortex. There, if we are to care for our bodies, the determination to do so takes place. There, when we begin getting emotional about something, is where the action is, not in the heart, but in the seat of mental activity—the cortex.

It is certain that you want to be in the best of health. You believe you can learn how to care for your body, you are willing to receive information about how to care for it, and you are willing to act on that information. This willingness does not necessarily mean that it will be easy to change patterns of living and thinking, but it does mean that you will have a rewarding experience if you persist.

You do not need to be told that the relationship existing between the mind and the body is intimate, one sympathizes with the other. If you hit your thumb with a hammer, do you not hurt all over, perhaps feel sick at your stomach? Of course you do.

Send questions on home-nursing problems to: Home Nursing Editor, LIFE & HEALTH, Washington, D.C. 20012. Enclose a stamped, addressed envelope for your reply.

Can our imagination make us sick? Can fear, grief, anger, and the other negative emotions make us sick physically? What about worry? Does it have a poisonous effect on the body? Is it wrong to worry, and if so, why?

If we really analyze worry we discover DOUBT written large. The worried Christian is really doubting that his heavenly Father loves him, cares for him. He has forgotten the promise that God will permit only those things to come to him that are for his best good.

In the promises of God's Book, the Bible, God is speaking to us individually, speaking as directly as if we could listen to His voice. These promises are leaves from the tree of life, that marvelous tree spoken of in the Revelation as John describes the earth-made-new. They communicate to us His grace and power. If we receive them, assimilate them, they give strength to the character and inspire and sustain life. They give us faith and courage, and faith and courage give vital energy to the whole body.

Please note that claiming these promises, thinking positively about them, gives vitality, a physiological response, to the living body. Grasp that fact, and not only is faith increased but also something happens to the body itself.

Surely anything we can do to increase our vitality is worth a trial. We may have to change our habits a bit, for it is one thing to know something but quite another to experience it. But if courage, hope, faith, sympathy, love—these thoughts—if they can give health to the body and strength to the soul, then do we not have two good reasons for giving them a trial?

An experienced Christian author, Ellen G. White, says that nothing else has such healing power as thinking positively with thanksgiving. If thanksgiving and positive thinking have such power, surely we should make a determined effort to add them to all the other things that we know are good for us—moderation in eating, drinking, working, resting, and playing.

So let us be thankful, praising God for His goodness to us. Away with negative thoughts—discontent, discouragement, groaning, and complaining. Let us resist these negative thoughts, and in their place put the promises of God. Thank Him for His oversight of your life, praise Him for His goodness. Away with wishful thinking—"I wish this, I wish that." Away with thinking about how you wish someone else would conduct his life, do this, not do that, and so on.

Let us determine from this moment to think positively, to learn what the promises of God are, and to cling to them. Let us be healthy, strong in faith, strong in spirit, and strong in body to stand firm and true, ready to do whatever life brings our way to do. ▲

CONSIDER CARROTS

By LOUISE PRICE BELL

CARROTS are such common vegetables that many people ignore them except as a colorful addition to stew. This is where they make a big mistake, for besides being acknowledged by physicians as one of the best sources of vitamin A, a medium through which night blindness can be noticeably improved, carrots are good to eat.

Do not forget this golden-hued health-giving vegetable, and do not always cook it. It is true that tender carrots cooked in a small amount of water, well seasoned, and touched with margarine are delicious, but some of the vitamins are lost in cooking. There are so many ways to use carrots raw, why waste the time, energy, and heat to cook them?

Scrub carrots of equal size, slice them with a vegetable slicer, and drop the bright strips into a bowl filled with chipped ice and water. Set it in your refrigerator for an hour or two, serve the curled-up crispies, and see how rapidly they disappear.

If you prefer you can roll the strips, hold them in position with toothpicks, and drop them into the ice water. This method takes more time, but the results are good to look at and to eat.

Limp raw carrots are far from appetizing, so make good use of your refrigerator when preparing carrots.

The next time you serve shredded cabbage for coleslaw, shred a crisp raw carrot or two with the cabbage. It adds color, vitamins, flavor, and verve to the salad. Grind an equal amount of crisp raw carrot and seedless white raisins, mix with your favorite salad dressing, and serve on crisp lettuce for a healthful and delicious salad that calls for repeat orders.

Make an orange gelatin base (or lemon, if you prefer, although you will not have so colorful a result), pour it into molds until they are half full, and add enough finely grated raw carrot to fill them. This gelatin salad may be made with ground seedless raisins. When it is unmolded and topped with mayonnaise and a sprig of mint, it is colorful, particularly when served on a blue salad plate.

Crushed pineapple combines well with ground raw carrots, and when the two ingredients are used in equal proportions the salad is pretty enough for a party.

If you have never made a sandwich filling of equal parts raw carrots ground or grated and peanut butter moistened with enough salad dressing to make it spreadable, you have missed something. Spread it on whole-wheat bread, top it with tiny crisp lettuce leaves, and it makes a sandwich that is grand for school lunches and perfect for home consumption.

It may become a family favorite to be used on a variety of occasions.

With garden-fresh carrots and onions, make a carrot-and-green-onion soup. Use your canned or frozen carrots for the same nourishing soup later in the season. To make it, heat 3 tablespoons margarine in a saucepan, add ½ cup chopped onion, and simmer 5 minutes. Add 3 tablespoons flour, 1½ teaspoons salt, blend well, stir in 5 cups milk gradually, and cook until thickened, stirring constantly. Add 1 cup sieved or cubed carrots, and serve with crisp crackers.

Can every extra carrot you have. Nothing should be wasted, as we all know. In the winter season use canned carrots in a large variety of ways to keep your family in good health. ▲



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dietitian says

By Dorothea Jones

NOW THAT SCHOOL is under way and vacation is over, what are you doing about that most important need of the day, breakfast? The word *breakfast* literally means "break the fast." After a good night's sleep your body is ready to refuel for the day's activities.

Many experiments have been made to show that breakfast skippers usually hit a slump in midmorning, therefore are not so alert and efficient as breakfast eaters. Breakfast skippers actually have been proved to be more accident prone.

The usual excuses for not eating break-

What's for Breakfast?

fast are Not hungry and No time. There are several reasons for not being hungry in the morning—habit, too much and too late eating the night before, and boredom with the usual breakfast fare.

I am sure you will agree that school children and husbands should begin the day with a good breakfast. But what about mamma, who is a bit overweight and would like to shed a few pounds? Should she skip a meal to lose weight? It has been established that breakfast is a most important meal for weight watchers. If you want to reduce, skip the evening meal. It is the one that usually pads on the poundage.

Breakfast menus may follow various patterns. You may serve the conventional type of American breakfast of cereal, fruit, and protein, or you may prepare a menu that most people serve at dinner-time. Many families have found this plan a satisfying arrangement. Following such a program, you eat lunch at noon and a light meal in the evening, consisting of fruit, toast, and broth or cereal.

Breakfast should supply a third or more of the calories for the day. The amount eaten depends on the energy requirement of the day. Age, sex, and activity should be taken into consideration.

Send questions on food to The Dietitian, LIFE AND HEALTH, 6856 Eastern Avenue NW., Washington, D.C. 20012. Enclose stamped, addressed envelope for your reply.

Breakfast may include the following:

1. Fruit—in summer, two kinds, both fresh; in winter, fresh, canned, or dried.
2. Cereal—may be in the form of whole-grain toast, muffin, roll, wheat or soy stick, and/or cooked or prepared cereal.
3. Protein food—at least one, described later in this article.

Fruit. Fruit is so varied and plentiful in most localities that not much needs to be said about it, except that it is most healthful to use it fresh as nature brings it to us. Use a little honey with it if you think it needs sweetening, but learn to like it as is. In using dried fruit, do not put sugar with it and do not cook it for long hours. Soak it overnight in hot water. That is all it needs.

Better use whole fruit, such as grapefruit and oranges, rather than the juice alone. If you do buy frozen juice, get it without sugar. If you must buy canned fruit, get it without sugar.

Cereal. Cooked cereal may be and should be varied. Use a wide variety. Some of the less-common grains are whole wheat, oat groats, brown rice, buckwheat groats, hulled barley, hulled millet, and milo maize. Many grains may be used cracked or coarsely ground. The following grains or any combination of them may be used: barley grits, buckwheat grits,

oven-cooked wheat,* seven-grain cereal, steel-cut oats, hominy grits (yellow hominy has more vitamin A than white hominy has), yellow corn meal, brown-rice grits, and soy grits. Whole-grain cereals should be cooked for several hours. General directions are to use 1 cup cereal, 1 teaspoon salt, and 2 or 3 cups water. It may be cooked in the following ways:

1. Slow baked dry as part of the cooking process.
2. Slow baked in oven after water is added.
3. Cooked in deep well in stove or in fireless cooker.
4. Cooked in an electric cooker, fryer, or bean pot (may be purchased at hardware store or with trading stamps).
5. May be cooked in a widemouthed thermos jar as follows:

While doing the breakfast dishes put a cup of wheat or any whole grain or any combination of whole grains to soak by covering with water. While doing the supper dishes drain off the water into a measure and add to it enough water to make three cups. Heat it to boiling, add salt and the soaked grain, and bring to an active boil. Cracked cereals do not need soaking, but bring them to a rolling boil after measuring the grain, water, and salt. Pour the boiling water and grain into a preheated widemouthed thermos jar. Tightly cap the jar and turn it on its side until time for breakfast. Then dish it into bowls and serve it.

Never use sugar on cereal. Instead, use raisins, dates, figs, or sliced bananas. In place of cow's milk or cream try using nut cream. You will find it delicious and a nice change. Make nut cream by liquefying $\frac{1}{2}$ cup of any kind of nuts with 1 cup water, 1 teaspoon honey or two dates, and a pinch of salt. Also it may be made by thinning down nut butter with water to the desired consistency.

We do not need to use cereal always as a mush with milk on it. For leftover cereal, after breakfast while the cereal is still warm, mix it with chopped nuts, sunflower seed meal or sesame seed meal, and thyme or sweet basil, and pack it into a square or oblong dish. Next morning slice and brown it. Your family will enjoy this dish. Millet is particularly good this way.

Any cereal may be cooked with soy grits to add more protein. If prepared cereals are used, be sure they are made from whole grains. Rolled oats may be toasted and used as a dry cereal without cooking.



CLASSROOM DEMOCRACY

By PAULINE CHADWELL

The teacher reaches forth to find,
To give strength to the searching mind.
The child discouraged, child ignored,
By her compassion is restored
To faith and human dignity,
To share in opportunity.

Waffles

- 1 cup milk (dairy or soy) or water
- $\frac{3}{4}$ cup whole-wheat flour
- $\frac{1}{4}$ cup Loma Linda Foods soy flour
- $\frac{1}{2}$ teaspoon salt
- 1 tablespoon oil
- 1 tablespoon brown sugar

Mix thoroughly and bake in a hot waffle

LIFE & HEALTH

iron until nicely brown. These waffles rise by steam and take a few minutes longer than other kinds of waffles. You must use a heavy waffle iron.

Variations on the above recipe:

1. Use yellow corn meal or corn flour alone.
2. Use corn and soy flour.
3. Use all rye flour.
4. Use all buckwheat flour.
5. Use any combination of flour equaling 1 cup.

Protein. Here are some suggestions for putting extra protein into the breakfast menu:

1. Sprinkle a tablespoon of sunflower seeds or sesame seeds or ground nuts over the top of a waffle just before baking it.
2. One rounded tablespoon of food yeast equals approximately the protein of one egg. Add food yeast to cereal, hot or cold tomato juice, or hot vegetable broth.
3. Add extra protein to cooking cereal by adding soy flour or soy grits.
4. Nuts are an excellent source of protein. They may be eaten alone from the shell, sprinkled over cereal, used as butter on toast, or made into cream or milk for a breakfast cereal or beverage.
5. Seeds are a fine source of protein. Sunflower, sesame, chia, and flax seed are the best known in this group. They may be used separately or combined in equal amounts. They may be used whole and added to breakfast food or made into meal. For a delicious spread on toast, mix the meal of these four seeds with enough mayonnaise to make it stick together and spread it on toast.

Additional Breakfast Ideas

Garbanzo Toast

Liquefy or mash two cups of cooked garbanzos. Add enough soy milk to make the consistency of thick gravy. Heat in a heavy kettle or a double boiler. Season with salt to taste. Serve hot over toast points or squares. May also be served over Ruskets biscuits.* Garnish with chopped parsley.

Oatburger Patties

(Try your oatmeal this way)

- 1 cup VegeBurger*
- 1/3 to 1/2 can mushroom soup
- 1 cup dry oatmeal
- 1/4 teaspoon Italian seasoning

Mix VegeBurger and oats together and enough mushroom soup to make the mixture stick together. Make into patties and brown them in a small amount of cooking oil on top of the stove or in a quick oven.

Mushroom Burger

- 1 cup VegeBurger*

- 1 can mushroom soup

Mix together and heat. Serve over hot waffles or toast points. Makes 4 half-cup servings.

Cashew French Toast

- 1 cup water
- 1/4 cup cashews
- 1/2 teaspoon Savorex*

Liquefy all ingredients and dip dry slices of whole-wheat bread in the mixture. Brown in a small amount of cooking oil or bake in a quick oven. You may substitute 1/4 cup cashew butter or peanut butter for the cashews.

Cashew Cream Gravy

Use the above ingredients, adding 1/2 teaspoon Smokene.* Cook in a heavy kettle or a double boiler until thick, and serve over steamed brown rice or millet as a breakfast dish.

Broiled Nuteena*

Slice half rounds of Nuteena, brush lightly with oil, and sprinkle with food yeast. Broil until nicely browned on both sides. Serve hot. Proteena,* VegeChee,* or Vegelona* may be substituted for Nuteena.

Beverage

May be milk (dairy or soy), plain (hot or cold), or mixed with powdered carob (1 teaspoon to a cup and a bit of vanilla). Nut milk or other protein beverages are healthful and delicious.

Did you ever serve soup for breakfast? Try it for a change. I think your family will enjoy it. Always use a soup that has protein in it, such as lentil, split pea, liquefied frozen peas, garbanzo, and green soybean. Served in a cup, this soup can take the place of a beverage.

Soy cheese, fresh or canned, may be broiled or browned in the oven. Either kind may be scrambled and served on toast.

Loma Linda Food Company Little Links make a fine breakfast protein. They may be prepared in a variety of ways.

Vegelona* Hash

Grind equal parts of potato (raw or cooked) and Vegelona. Add a few ground onions. Make into patties and brown in a hot oven or cook in a fryer as regular hash is made.

Sesame Toast

Lightly toast whole-wheat or soy bread, brush with water, and dip in sesame seeds. Put under broiler for toasting. You will not have to urge your family to take seconds on this dish. ▲

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BEAUTIFUL BANANAS

(From page 17)

ripe but with a little green on the skin in place of an egg when making mayonnaise. Beat the banana smooth. Then add gradually oil, a little lemon juice, salt, and a drop of yellow color.

These banana salads are delicious and healthful:

Jellied Banana Salad

- 1 package seaweed gelatin
- Salt
- 1 tablespoon lemon or lime juice
- 1 banana, sliced
- Endive
- Red or green mayonnaise
- Salted almonds

Prepare a package of lemon, orange, or pineapple gelatin. Add a pinch of salt, the lemon or lime juice, and the banana. When set, put on curly endive and serve with red or green mayonnaise and a sprinkle of salted almonds.

Traditional Fruit Salad

- Bananas
- Pineapple, cubed
- Oranges, cubed
- Seedless grapes
- Whipped cream or dessert topping
- Salted almonds
- Red cherries, sliced

Run the tines of a fork down the sides of bananas to give them a fluted edge, then slice them diagonally. Add equal amounts of pineapple and orange cubes and a few seedless grapes. Drain and fold in whipped cream or other topping. Decorate with a few salted almonds and sliced red cherries.

Ambrosia

- Orange slices
- Banana slices
- Grated coconut
- Powdered sugar or honey

Alternate orange slices, banana slices, and grated coconut in your prettiest salad bowl. Sprinkle with powdered sugar or a drizzle of honey. Let stand in the refrigerator a few hours to blend the flavors.

Banana Salad Circles

- Bananas
- Peanut butter
- Lettuce
- French dressing

Slice bananas in 1/2-inch pieces. Spread them with peanut butter and put them together as tiny club-style sandwiches, using four slices of bread. Serve the sandwiches on a bed of lettuce with French dressing.

Banana Salad Logs

- Bananas
- Pineapple juice



STORY OF AN OPERATION

By MOE CARMEN

The surgery was a success, they said.
They wheeled me back to my lonely bed.
No pat, no words of encouragement;
Seemed not to care if I stayed or went.
And there I lay feeling mighty bad,
Sick and alone and, oh, so sad.

An angel then swept into my room,
And—wonder of wonders—there was no gloom.
She cleansed and massaged, and hour by hour
Within her hands was wonderful power.
The dressings were changed with professional care.
Kind and concerned, she lingered there.

She wore a neat little cap of white.
Her smile, so sunny, made life seem bright.
She left—and I hoped she'd soon come back.
Never entered my mind, Was she white or black?
I learned that night there is only one race
When you're awfully sick and it's death you face.

- Salad dressing
- Cream
- Crushed nuts or cooky crumbs
- Greens
- Red and green gelatin cubes

Slice bananas in half lengthwise. Dip in pineapple juice, then in salad dressing diluted with a little cream. Roll the logs in crushed nuts, cooky crumbs, or some of each. Put the logs on a bed of greens with the round side up. Decorate the plate with a few tiny cubes of red and green gelatin.

Fruit Plates

Fruit plates may be striking in their beauty and originality. There is a trend toward serving bananas in their skins. The bananas may be of the small-finger

variety nicely trimmed or a section of a regular banana. Remove part of the peel from the top. Brush the exposed part with fruit juice to keep it from darkening. Decorate with chopped nuts, red or green mayonnaise, kosher-marshmallow whip, or candied fruit.

These desserts go well with a festive meal:

Broiled Bananas

- Bananas
- Butter
- Marshmallow whip

Remove a strip of the banana peel. Spread butter over the top and then a layer of marshmallow whip. Heat under broiler about 5 minutes or until slightly softened.

Sliced Bananas With Oranges

- Sliced oranges
- Sliced bananas
- Orange juice
- Honey

Combine equal amounts of oranges and bananas in a bowl. Spoon the mixture into dessert dishes with a little of the orange juice. Dribble on a little honey, if desired.

Banana Layer Cake

- 1 angel cake
- Bananas
- Whip topping
- Lime sherbet

Slice the cake into four layers. Between two layers arrange sliced bananas and spread with topping. Between the other two layers put a thin filling of lime sherbet. Cover the cake with whip topping. Keep frozen until ready to serve. Decorate with a few fresh flowers. ▲

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STOMACH-ACHE

(From page 13)

go on about their regular evening business. He removes the ice bag for about five minutes every quarter hour. He gives Jack sips of warm water whenever he calls for it, which is not often. About ten o'clock he calls Dr. Green on the telephone and tells him all that has happened, what he found out, and that Jack's pain seems to be a little less severe.

"What you have done has been the right thing, Wilson," says Dr. Green. "Best of all, you didn't give Jack a laxative or put a hot-water bottle on the painful spot. Neither should be done to a person with a pain in the abdomen until it is known what is wrong and known to be safe.

"It is quite possible that Jack has an inflamed appendix, but he will probably

get along safely until morning, when I will come over to see him. Watch him carefully. If his pain disappears suddenly, call me at once. That is not likely to happen, but it is possible. If it does, it may mean rupture of his appendix, which would call for surgery without delay. Take his temperature every two or three hours. If it should fall suddenly or if it should go more than one degree higher than it is, call me. I would need to examine him promptly and carefully to see what should be done to keep him out of danger.

"If you don't call me sooner, I will come over to see Jack about eight tomorrow morning. Then I will take a drop of blood for a blood-cell study and do whatever else is necessary to find out exactly what is wrong with him. By watching him carefully, we may be able to get him by without an operation. If we cannot do that we at least can choose a time for surgery that will be the least dangerous and most effective.

"I wish all the people in Eastlake knew as much as you do about the meaning of what they call stomach-ache, and what to do when somebody in the family has one, Mr. Wilson. We doctors would not lose so much sleep on account of being called when there is no real need for our services; on the other hand, we would not be so worn out when something drastic needs to be done to save life because there has been too long a delay in calling for us." ▲

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Keep Busy and Be Happy

By HENRY H. GRAHAM

A TRAVELING salesman of my acquaintance had been feeling under par. He lacked energy and had vague aches and pains that had never bothered him before. Some of them were in the area of the heart, and he became convinced that he had serious heart trouble.

Fearfully he consulted a physician, confident that he would be given a death sentence. He had retired to a quiet life.

The doctor gave him a complete examination after asking many questions about his symptoms and living habits. When he finished he leaned back in his chair and studied the patient.

"I can't find anything wrong with you," he said with a grin. "Your heart is all right. You have too much spare time on your hands and don't know what to do with it. When you begin working again, I think you'll be your old self. Lots of people find themselves feeling as you do when they have too much free time.

MONEY TO BURN

By GENE CHAMBERLAIN

What they ought to put
On cigarette packs is:
"You just paid your soot
And nicotine taxes."

"They begin thinking about all sorts of unwholesome and damaging things. They develop mysterious aches and pains here and there, as you have done, and sometimes have symptoms that sick people have. I think that's your whole problem. The mind has a tremendous effect on the body and its functions. Always remember that. Stay calm and keep busy."

Greatly relieved, the salesman began to cover his territory again. He was so occupied for long hours nearly every day on his job that he had little time for thinking about himself. As the doctor predicted, his unpleasant symptoms left.

The busiest people are the happiest and get along best in life. Hard work in moderation never hurt any healthy person. Worry, concern, loose living, dissipation, inadequate rest, insomnia, and poor eating habits have hurt healthy people. Worry is one of the greatest of evils. It upsets digestion, interferes with liver function, kills appetite, destroys peace of mind, and leads to serious illness if it continues long.

Doctors know how damaging worry can be. That is why they tell their patients not to fret and stew. Worry alone never did anyone a bit of good—only harm. It has not solved a single problem since the world began, but it has caused much trouble.

On the average, a busy man has the best health, the sunniest disposition, and the most rewarding life. His time is so taken up by useful undertakings, wholesome social activities, and recreational pursuits that he has little opportunity to think about life's petty problems. He is usually broad-minded and understanding. He is quick to make allowances for the puzzling behavior of others, and willing to apologize for any faulty conduct of his own. He has more friends than people do who have little of importance on their minds.

The other day I met a woman on the street I have known for years. She radiated good cheer. She had a positive approach to every subject we discussed. She was effervescent with happiness.

"How are you?" I asked her cordially.

"If I were any happier I'd burst," she laughed. "I'm busy as a bee. Don't have a spare moment, but I love it."

By contrast let us look in on another woman of about the same age. For years this accomplished woman had been an efficient private secretary to a prominent businessman. Her office was her world, and she had no life outside. Now she is miserable because she has retired, and time hangs on her hands. She does not know what to do with herself. She has no hobbies, never goes to church, never indulges in any social life, and has no real friends.

This talented woman needs to get into the swing of things, but she does not know how to go about taking the plunge. No doubt she would be more contented if she went back to work. Work is all she knows. But, like the rest of us, she needs more than work, important though it is.

From an associate of hers I learned that she has consulted a doctor because she does not feel well. After hearing her story, the physician gave her about the same advice as the doctor gave the traveling salesman who was concerned about himself. If she follows the recommended procedure, gets some important activities on her mind, uses her time for worthwhile projects, and looks around to see who needs a little help, her ills will disappear.

Drawing on my own experience, I can back up what those two physicians told their worried patients. A few times I have worried considerably myself, when I could not seem to pitch in and do my work. I let things slide for a while. The more I permitted myself the so-called luxury of indulging in sheer idleness the more wretched, bored, and unhappy I became.

I developed symptoms that alarmed me. Sometimes I became mildly nauseated, I had headaches, and nervousness plagued me. I was easily annoyed by the normal play of children. I slept poorly and often spent the night reading because I could not relax. I was afraid of becoming a chronic insomniac. For no reason I built up a dislike for people of whom I had been fond.

A doctor set me straight. When I am busy I do not have any of the old symptoms. I am tolerant with people who disagree with me. I hold my temper and do not become easily irritated. I still have not sprouted any wings, but so far as I know nobody else has either.

If you want to be happy, enjoy good health, and get the most out of life, fill your days with useful duties and discharge them capably. Have plenty of fun as you go along. If you think you have too much responsibility and too much to do, be thankful. You are fortunate. Get plenty of rest and exercise wisely, and you will look forward to dealing with your obligations. You will have the strength and courage to fight life's battles and win most of them. ▲

PROFILES

(From page 7)



and Mrs. Griffin also graduated from Argubright Business College. Her first position was with the *Good Health* magazine, edited by John Harvey Kellogg, M.D. Before moving to Washington, D.C., Mrs. Griffin was a reporter for the *Moon Journal*, a Battle Creek newspaper.

The Griffin family hobbies are people, nature, and travel. Both Mr. and Mrs. Griffin are avid readers, and they enjoy walking and swimming. Foremost in their interest are three sons, a daughter, and eighteen grandchildren.

During the past five years the Griffins have traveled to Europe, Hawaii, the Bahamas, Canada, and extensively in the United States.

Even though the Griffins travel to far-away places, they manage to find their way back to Washington, D.C., for several visits yearly. They love Washington, and they come to visit friends and relatives.



Elaine V. Emans ("One Birch," page 25) was born in Greenleaf, Minnesota, and now lives in Spring Lake Park near Minneapolis with her railroad engineer husband, William L. Marshall.

After graduating from State Teachers' College, Mankato, Minnesota, she taught school for a time. In 1933 she began selling verse to magazines. Miss Emans has been writing and publishing verse for more than three decades and is the author of two books—*About Spiders* (prose) and *Earth's Child* (poetry). She is an enthusiastic nature lover, drawing many subjects for her writing from nature. She and her husband are especially fond of animals.

Other family interests are art, photography, reading, travel, and music. In addition to being a railway engineer, her husband is first violinist in a philharmonic orchestra. One of her special interests is



attending the concerts in which he plays.

In keeping with her enjoyment of nature study, Miss Emans' favorite eating place is a grassy bank beside a stream preferably approached by cycling or hiking. ▲



Build Bridges

By ELAINE BERWITT

THE popular refrain today is "What a mess the world is in!" Instead of talking about it, you can do something about it—build a humanitarian bridge to help your fellow man cross over into a better world.

Look around you, and you will see many people building humanitarian bridges. There is an infinite variety of them, and you can build the one you choose.

I take pleasure in my bridge. It is going every week to lead a discussion group on current events for twenty-five residents of a home for the aged in Cleveland, Ohio.

The residents feel isolated from the outside world and no longer a part of the mainstream of life, but I change that feeling of separation when I bring them the weekly news. Then by welcoming their comments I help them to know that someone cares about what they think and have to say.

Recently they and I took a trip out of this world by means of a moon-venture article I had written.

Afterward a great-grandmother of 83 leaned over to me, mischievously pinched my cheek, and said, "Mrs. Berwitt, will wonders never cease? We used to talk about reaching for the moon, and now you young people have actually reached it. I guess I'll stick around and find out whether you discover a better world away up there among the stars. If you do, you can be sure I'll be among the first ones to buy a ticket into outer space."

Everyone chuckled at her happy outlook.

Inwardly I chuckled too. I knew I had succeeded in helping those dear people forget their aches and troubles for a little while.

When I was about to leave, a nearly blind woman came over to me and said, "I would manage to come to these meetings even if I had to crawl. This discussion gives us our only chance to express ourselves freely and know that someone from the outside still cares enough to listen. You offer a ray of sunshine, and your articles convince us that life still has meaning, and we are encouraged to go on living."

If my bridge can accomplish this result, I thought, my life also has a little more meaning.

You can experience this kind of meaningful extension in your life by building a bridge to some lonely person. Each one of us can have a part in helping some human being cross over to a better world. Edwin Markham expressed this idea well:

"There is a destiny that makes us brothers;

None goes his way alone;

All that we send into the lives of others
Comes back into our own."

Doctors believe that bridge building is health giving. They prescribe this idea regularly, and with good reason. When someone depressed walks into the office, the doctor suspects that this patient is neglecting to build bridges.

Dr. H. O. Swartout said: "People who have studied mental illness thoroughly have found that an outstanding characteristic of the mentally ill is that they are extremely self-centered." In favor of bridge building Dr. Swartout added: "People who live for the benefit of others seldom become mentally ill."

The bridge-building kind of humanitarian endeavor is insurance for mental health. People in all walks of life recognize this fact.

Dr. Albert Einstein said: "A hundred times every day I remind myself that my inner and outer life depends on the labors of other men, living and dead, and that I must exert myself in order to give in the same measure as I have received and am still receiving. . . . Only a life for others is a life worth while."

Make your life worth while by helping someone today. Then you will not be discouraged when you hear the remark "What a mess the world is in," because your bridge-building endeavor will convince you that you are doing your part to make it a little better. Then you will experience the Biblical words: "Behold, how good and how pleasant it is for brethren to dwell together in unity!" (Psalm 133:1). ▲

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