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Life & Health

64th YEAR OF
PUBLICATION

THE NATIONAL HEALTH JOURNAL



D. K. MARTIN

- ★ Speed, Spice, and Scotch
- ★ How Good Is Honey?
- ★ Some Causes for That All-gone Feeling

- ★ Epilepsy, the "Mystery Illness"
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Life & Health

THE NATIONAL HEALTH JOURNAL

FOUNDED IN 1885

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OUR COVER

After a long, dormant winter the warmth of a caressing sun and songs of merry birds awaken sleeping nature to her new life. Once again she prepares herself for the gigantic task of providing sustenance to all living things. Brushed and swept by March winds, bathed with April showers, she is ready to display her beauty in the gorgeous azalea display of early spring.

The beautiful azalea garden pictured on our cover is at the home of Mr. and Mrs. Frederick L. Pratt, 7324 Piney Branch Road, Takoma Park, Maryland. This garden attracts many appreciative visitors. It is a monument to the untiring devotion and care of its proud owners.

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The Editor's Comments

STRIKING BACK AT CANCER

CANCER is everyone's fear: its control is everyone's hope and everyone's business. It can strike rich and poor, executive and farmer, man and woman and child. In 1949 mortality from this disease will probably reach an all-time high of 200,000.

"While tragedy cannot be given a price tag, the cost of cancer to the country is staggering. The medical expense for the treatment of indigent patients, where bills must be paid by private charity or the government, averages more than \$400 for each case. No dollars and cents estimate can express the shattering impact of this disease on a family. And cancer strikes in every other home in America."

Just think of it—"every other home in America." This grim, terrible threat is your concern and mine. Cancer may strike you. It may strike me. Anyone may have cancer. This fact makes it a personal matter. It is a summons to battle—a call to strike back at the monster, sword in hand. This sword is a weapon that all of us can use. Let me tell you about it.

The American Cancer Society has undertaken a nation-wide plan of battle strategy. Out on the cancer frontiers are 242 research projects in 84 universities and laboratories in 29 States and the District of Columbia, where the soldiers of science are gathering information about the enemy. Four hundred and seven cancer clinics are working as detection and information centers. Thousands of volunteer soldiers are devoting time and energy providing care and service to other thousands of cancer casualties.

"The Society's Field Army of volunteer workers renders personal aid to cancer patients—such as cancer dressings, transportation, and home services. They help establish and staff cancer clinics and publicize local cancer facilities." Thus by research, education, and medical service a three-pronged battle attack is under way against the enemy.

A Sword in Your Hand

To help put a sword in your hand and equip you for the battle, LIFE AND HEALTH, in cooperation with the American Cancer Institute, passes on to its readers these facts to protect you and your dear ones. Learn to recognize cancer's danger signals. Here they are:

"Any sore that does not heal, particularly about the tongue, mouth, or lips.

"A painless lump or thickening, especially in the breast, lip, or tongue.

"Progressive change in the color or size of a wart, mole, or birthmark.

"Persistent indigestion.

"Persistent hoarseness, unexplained cough, or difficulty in swallowing.

"Bloody discharge from the nipple or irregular bleeding from any of the natural body openings.

"Any change in the normal bowel habits."

If you have definite symptoms, keep a cool head. See your doctor *at once*. His diagnosis should tell whether treatment is required. And remember, early treatment by X-ray, surgery, or radium may save your life. The attack on cancer is getting results, but early treatment is vital to recovery.

We have high hopes that the mystery of cancer, hidden deep in the "wild" cell growth of its victims, will yet be solved, and that relief, and even cure, for thousands of sufferers is not too far away. But we must all unite in the battle. Take the sword in your hand and start fighting now. Give to the American Cancer Institute, and hasten the day of victory. We encourage our readers to make a cash contribution now to this worthy project. Mail your contribution to "CANCER," care of your local post office. As you underwrite the campaign for victory you give to guard your own life and the lives of your loved ones.

D. A. D.



NEWS IN Small Doses

- HOUSEFLIES may transmit more than twenty diseases of human beings.
- ACCORDING to medical authorities, every sneeze launches enough germs to send 100 people to bed.
- By mid-year 1949 the Army will be short 3,700 physicians, according to a report by the secretary of national defense.
- THE shortest subway in the world operates in the 760-foot tunnel between the Capitol and the Senate office building in Washington, D.C.
- WHEAT should be checked in the bin or granary for sweating and insect populations. If insects are present, the grain should be fumigated to kill them.
- IN a single lifetime the human heart completes 2,600,000,000 beats and sends 35,000,000 gallons of blood on its life-giving errand throughout the body.
- THREE minutes from now another American will have died from cancer. An hour from now twenty more will have joined him.
- RATS are blamed for about two billion dollars' worth of damage in the United States per year. The rat-borne diseases have killed more human beings than all the wars of history.
- FAT people have diabetes much more frequently than those of normal weight. Those people who are definitely overweight at the age of fifty have ten times more cases of diabetes.
- LABORATORY experiment has confirmed wartime evidence that near-starvation benefits persons suffering from high blood pressure, say three scientists from the laboratory of physiological hygiene of the University of Minnesota, Minneapolis.
- A CHEST X-ray is the most simple, quickest, and effective way to discover tuberculosis when it is just beginning, before any definite trouble has been noticed and before it has been spread to others. Fortunately this is also the time when the disease is most easily and quickly controlled.
- CLEVELAND is the test kitchen of the nation, according to C. W. MacKay, director of Kenyon Research Co., New York City. This firm's research studies here have indicated trends in buying and use of products so accurately that national studies and sales figures on the same subject months later have exactly the same conclusions.

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WHAT is the commonest American disease?" a stomach specialist was asked while eating in a fashionable restaurant.

"The disease without a diagnosis," was his startling reply. "You won't find it in textbooks or written on hospital charts. However, it is a disease from which probably half the American population is now suffering. We have patients right here in the restaurant."

He nodded toward the bar, where several guests were sipping too many appetizers.

"That's one variety," he said.

He discreetly glanced at an adjoining table.

A red-faced, round, little man was beating a catsup bottle unmercifully. His face grew more crimson with each smack of his fat fist. He was steaming to the point of violence. He muttered something about a train, and "this ——— bottle."

"There you have the ingredients which go into the all-American disease," he said. "Speed, spice, and Scotch are sins against the stomach that too many of us are guilty of committing."

"But exactly what is the disease?" he was asked.

The doctor wiped his lips with a napkin and picked up a spoon.

"Faulty habits," he said, rapping his spoon sharply against the table. "Poor habits of living are undermining the health of America. These habits are making us physically and morally weak. Speed, spice, and Scotch make for sour stomachs and sleeplessness. And sour stomachs make nasty dispositions."

The doctor was right, of course.

All three are highly explosive, especially when mixed within a closed cavity such as a nervous stomach. In short, they are dynamite.

After a busy person has used his stomach as a mixing bowl for this dangerous concoction, he eventually ends up in his doctor's office.

"I have indigestion, doctor," he says. "I'm nervous; I can't sleep."

Speed, speed, speed! We must get there faster, and back home quicker. Speed—supersonic, jet-propelled, radar-controlled speed! We are beginning to move so fast through our world that we grow dizzy. But we must be modern, fast, electric. Everything must be done better, faster. Even our leisure is taken in tightly compressed, well-mapped vacations. Not a second is lost, not a friend missed, not a car left on the road in front of us.

We have lost the fine art of doing nothing, and have substituted the vicious habit of always doing something. Like squirrels on a treadmill, we must keep everlastingly, fiercely pursuing something to do, going some place, seeing somebody. Many homes could be built without a living room, for all the time we spend relaxing there. Our living rooms are empty rooms on too many evenings. We eat out, come home late, get up early—ever on the go.

Even our vocabulary sparks and crackles under the high voltage we transmit. We pride ourselves on staccato brevity—sophisticated slang. Punchy, rapid-fire speech, like telegraphic code, is our aim—not a word wasted. Our verbs reveal inner compulsions of speed. We "snatch" a snack, or "dash off" a letter, or "catch" a bus. Speech

SPEED

CHARLES CAREY



SPICE

CHARLES CAREY



AND

SCOTCH

INTERNATIONAL NEWS
PHOTO

is becoming so crisp and blunt that a courteous person who pauses long enough to say, "Good morning, Mr. Jones; how are the wife and children?" is almost considered nosy.

Speed is savage. It has produced more peptic ulcers and spastic stomachs than Ford has cars. It is a cannibal that eats at our vitals, not the least important of which is our tender stomach. Tight schedules make tight stomachs. Stock complaint to doctors today is, "My stomach rolls up into a knot; I have heartburn after meals." Hurry and worry are recognized as the prime causes of these complaints.

The stomach is the mirror of the mind. A mind distraught by pressure, worries, and emotional turmoil puts the brakes on internal organs while it takes the day off for worry. An excessively irritable brain sends impulses to the stomach causing hyperacidity, spasm, heartburn, and pain. This does not make for decent digestion, as you can well imagine.

Spices are definitely taboo for nervous stomachs. Stomach specialists are agreed that highly seasoned, spicy foods, such as catsup, mustard, pickles, pepper, and other spices, have no place in the dietary regime of a patient suffering from nervous indigestion. The reason is that spices are irritants. Stomachs need to be soothed not sandpapered.

Those of us prone to nervous dyspepsia, which takes in over 50 per cent of the population, would be wise to avoid spices eternally. They irritate not only the nose, throat, tongue, and stomach but the intestines, kidneys, large bowel, and skin as well.

The greatest tragedy produced by spices is the murdering of a sense of taste. Taste buds are fragile and finicky. Strong spices numb them. An appreciation of finer, delicate flavors of natural foods may be quickly dulled. A luscious peach or savory vegetable dish may taste insipid to one who lavishly sprinkles spices. Do not let this happen to you. Guard your finer senses and the ability to enjoy delicious nuances of flavor in simple, natural foods.

The so-called tang of spices is proportional to the amount of irritation they produce in the mouth. They work by irritating tiny nerve endings in the tongue.

Sprinkle a "black cloud" of pepper on some sunny-side-up breakfast eggs. Then see how it works, where it goes, what it does. Some people relish the tangy nip, which is like a squadron of mosquitoes at work in their mouths. Actually, that is how pepper does its "nippy" job. It bites, or burns, little nerves which tell us soup is hot. Best and Taylor, deans of modern physiology, state that pepper has no taste; it is not perceived by the taste buds. Rather, pepper burns. It stimulates the same nerves that carry hot or cold. Of course, part of its nip comes from our noses. Too heavy a pepper spray makes us sneeze, and even sets our eyes to watering; and other spices act similarly. This is evidence that pepper is a strong irritant.

Now let us see what the folks downstairs think of eggs "swathed in black." The stomach is almost as delicate as the eye. Pepper accidentally sprinkled into the eye creates quite a commotion. Tears trickle; the eyeball becomes painful, red, and inflamed. The delicate mucous membrane of the stomach has thousands of tiny acid- and pepsin-producing glands. It reacts to irritants, just as the eye does. It waters and becomes red and inflamed. Acid and pepsin are poured out in overabundance to dilute the irritant. The unwelcome black cloak over breakfast eggs is hurriedly ushered out of the stomach. Vomiting may hurl it back at you, or it may be washed on with an avalanche of acid, mucus, and pepsin.

This extra amount of acid—hyperacidity—offers a real danger to a patient with stomach trouble. When a nervous, high-strung individual works under

(Turn to page 20)

SINS AGAINST THE STOMACH



J. DEWITT
FOX, M.D.



THE office of the Surgeon General of the Army estimates that approximately one tenth of all the battle wounded of World War II received head injuries, and other medical authorities estimate that about one seventh of those injured in that way will sooner or later become epileptics. Thus one battle-wounded veteran out of every seventy will eventually develop epilepsy—not a pleasing outlook for those who bore the burden of the fighting war. It is one of the ironies of our time, that the large-scale use of our modern medicine miracle workers has saved uncounted thousands of servicemen from immediate death only to condemn them and their families to indescribable embarrassment, humiliation, and suffering.

The battle wounded are by no means the only veterans of World War II whose war service has doomed them to epilepsy. Head injuries, not to mention various other condi-

predisposition to epilepsy. Now, however, the medical profession is becoming more and more familiar with a method by which it can be revealed with surprising accuracy. That procedure, first demonstrated by a German psychiatrist named Hans Berger, is known as electro-encephalography.

It is simple enough. Electrodes, consisting of metal buttons attached to the scalp with adhesive tape or collodion, are connected by means of tiny wires to amplifiers, which magnify up to a million times the feeble electric currents sent out from the brain. A complicated electromagnetic mechanism, actuated by those multi-amplified brain currents, writes the brain pattern in a series of lines resembling those used to show business trends, weather changes, and mortality rates. The experienced physician interprets these ink-drawn peaks and valleys, just as the heart specialist interprets an electric tracing of the heart action, or as the tuberculosis expert reads a chest X-ray.

The three major types of epilepsy are known as grand mal, petit mal, and psychomotor, or psychic, seizures. The victim of grand mal, the most dramatic and frightening form of the disease, becomes glassy-eyed, falls in a heap on the floor or across any object that happens to be in the way, emits a



EPILEPSY

DILANTIN SODIUM

- The "Mystery"

tions growing out of their war service, received in maneuvers, in intensive flight training, in accidents, and elsewhere, will swell the total. Nor has the civilian population escaped the greater epilepsy hazard bred by the war. Among the stay-at-homes the vastly stepped-up tempo of industrial production caused a steadily lengthening toll of accidents involving the head; and innumerable other war-created changes have brought, and will continue to bring, a tremendous increase in the prevalence of this disease.

Even without the impetus given it by the war, epilepsy would rank among the most widely prevalent of all forms of illness. Its current victims are estimated at 600,000 to 750,000, roughly equaling the victims of diabetes, active tuberculosis, or alcoholism. Moreover, there are about 14,000,000 persons—nearly 10 per cent of the total population—who have a definite predisposition to epilepsy, and need only some injury or other misfortune to change them from potential to actual epileptics.

Though head injuries received in battle and in civilian accidents, are a major factor in that change, there are many others. Among them are encephalitis, syphilis, measles, meningitis, tumors, hardening of the arteries in the brain, birth injuries, kidney disease, certain complications of pregnancy, marked lowering of the blood's sugar content, scarlet fever, disturbances of the internal glands, and emotional upsets.

Until a comparatively short time ago there was no way to determine whether a particular person had the dangerous

hoarse cry through clinched lips, starts biting his tongue unless someone prevents it by placing a wad of paper or a stick between the teeth, loses control of kidneys and bowels, and suffers violent convulsions. Petit mal seizures, much less dramatic, are marked by momentary loss or impairment of consciousness and sometimes, but not always, by a twitching of the eyebrows or eyelids. The victim of psychomotor seizures does not lose consciousness but experiences amnesia, and although acting normally, he has no recollection afterward of what he did while undergoing an attack. During seizures, which usually last only a few minutes, he does unusual things, such as moving the mouth in a peculiar manner, walking abruptly away from someone talking to him, or adjusting his clothing. During his much rarer, extended attacks he may travel to a distant city, and later wonder how he got there. Often he becomes pugnacious, and fights anyone trying to interfere with him. He may or may not have convulsions, but the violent convulsive movements which characterize the grand mal victim do not occur.



H. M. LAMBERT

prior to this one, and most of that progress has been made within the past decade or two. Some of it, indeed, is almost as new as the latest issue of the medical journals.

The epilepsy picture, as of the present moment, is this: Many victims can, under proper treatment, be relieved of their seizures entirely, and most of the others can have the number and frequency of their attacks reduced so drastically that they need not interfere with the satisfactory performance of their work in almost any field. Even before the latest medical discoveries brightened the epileptic's outlook, it had become an axiom of medicine that, under proper treatment, of course, "three fourths of the patients can be relieved of three fourths of their seizures."

A succession of drugs, each superior in one way or another to those already in use, has made that vastly more hopeful picture possible. For a long time, beginning in 1853, the sole reliance was upon bromides, which had the double disadvantage of benefiting few patients



By

JOHN M.
GIBSON

Director Public
Health Education,
State Department of
Health, Alabama

"Illness" Yields to Science

For centuries epilepsy was known as a "demon disease," and was treated like other "demon diseases," mainly by trying to exorcise evil spirits which were supposed to have taken possession of the victim. Before epilepsy finally yielded to scientific medicine, the unfortunate sufferer was subjected to well-nigh intolerable tortures, all in the name of so-called cures. Holes were bored in the skull to free the brain of putrid matter. The victim was made to drink the warm blood of someone who had just been killed. Many had to force down a gruesome powder made from ground-up human skulls. Windpipes were cut. Blood vessels were tied. Fingers and toes were ruthlessly amputated. Teeth and tonsils were jerked out. Snake venom was forced into the veins. Aretaeus voiced the prevailing medical desperation of his age when he cried, "We must administer everything that will do the slightest good, or even that will do no harm."

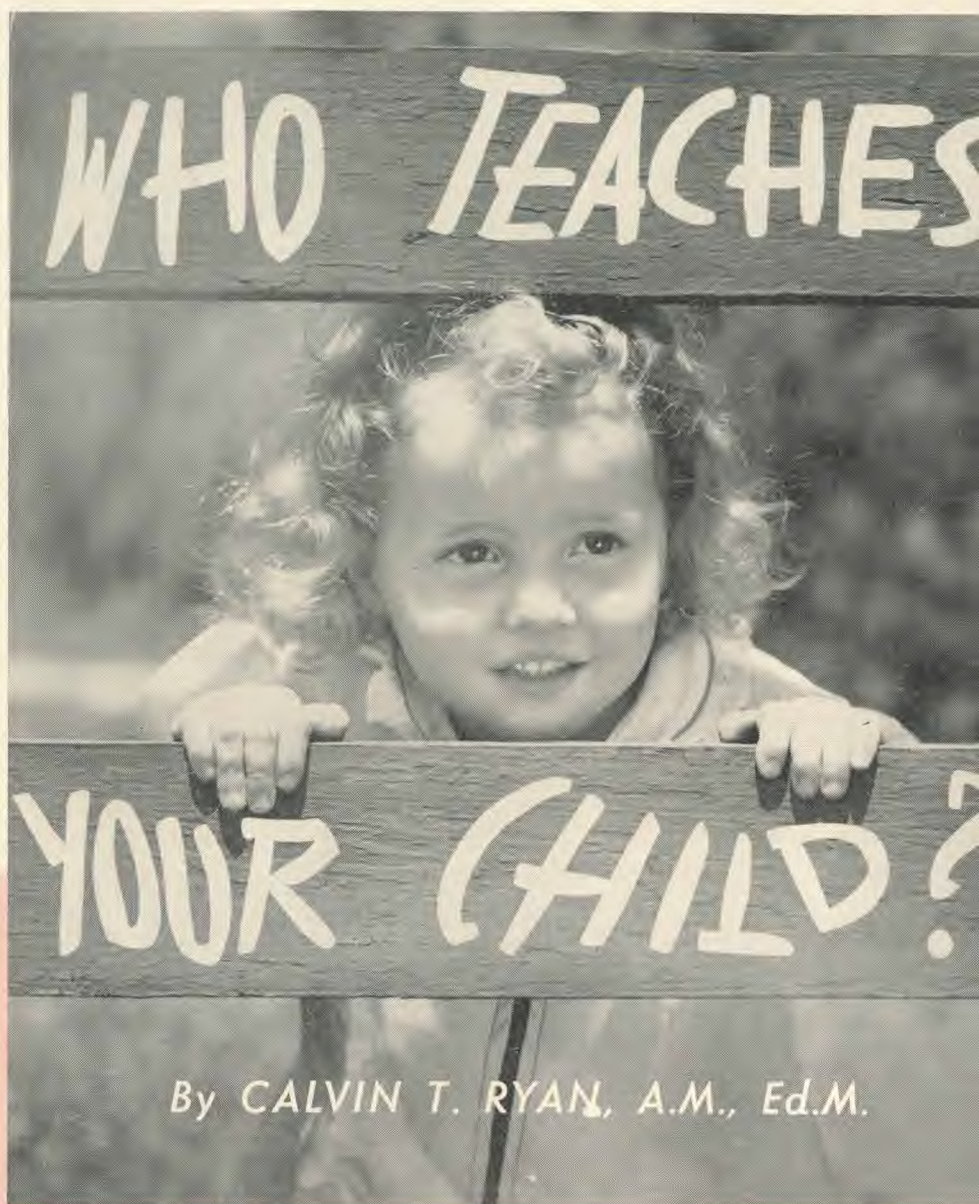
Thanks to the merciful discarding of such medical monstrosities, more has been accomplished for the epileptic within the past third of a century than in all the centuries

and causing extremely troublesome aftereffects, such as skin rash, drowsiness, depression, and even delirium. More satisfactory results began to be seen after the introduction, in 1912, of a product known as phenobarbital. Then in 1937 came dilantin sodium, which began to be used with marked success on cases that had failed to respond to either bromides or phenobarbital. After demonstrating to their own satisfaction that this new product would prevent electrically induced convulsions in cats, Dr. T. J. Putnam and Dr. H. H. Merritt began using it on human victims of epilepsy. In 1938 they reported that of 118 patients suffering mainly from grand mal who had previously been treated unsuccessfully with phenobarbital, 58 per cent became free of convulsions and another 27 per cent showed improvement, leaving only 15 per cent who were not benefited by this new therapy, which was resorted to after the previous standard treatment had failed. Dr. W. G. Lennox, of the department of nervous diseases of the Harvard Medical School, (Turn to page 23)

A LITTLE child is not only a mystery, he is also a miracle. His growth into an adult is equally miraculous. If something goes wrong in his teens, we place the blame on the home, on the school, or on the church. The effect of those three influences is so obvious that we find it easy to charge them with wrong teaching, or with no teaching at all.

But the child has many other teachers. Society at large—the community in which a child grows up—plays a great part in the child's "angle on life." The children in the same block or in the neighborhood teach one another. The normal child learns from every experience that comes his way.

We know that the child thrives better in a home where he has love and security. We know that they are so important, that if a child is deprived of them, he suffers all his life. We know that the home background may ruin the child's chances in life, and put so much evil in his character that it will weight him



H. A. ROBERTS

down the rest of his life. Yes, the kind of home Johnny and Mary have plays a striking part in their health and happiness.

The same is true when we turn to the school. We should not blame the school for all the failures in our children. We should remember that by the time they reach the school they have already been "schooled" in many angles of life, and have already received a strong bent in their character. The community and the home that produced Billy have already placed their mark upon him for good or ill before the teacher ever sees him.

School forms only a part of the child's life, and is only one of his many teachers. A good healthy society will show in the good healthy children it produces. Those early years tell in the child's character; and at times the school, fortunately, cannot undo what has been done. At other times we should like to see the school and the church be more influential. Occasionally one or the other, or both, may prevent a wrecked or wretched life. But the home remains the most important influence.

It is unfortunate that so much of modern life—in school, in books and magazines, in the movies, over the radio—ignores the influence of the past, and stresses the present. We must depend on the past, on tradition, for no generation is smart enough to start over again without depending on what has been given it by those who have gone before. Unless we moderns are wise enough to profit from the past, we shall not be able to improve the future. It is true, as has been wisely said, "We live on the work of dead hands, and by the wisdom of dead lips."

Of course, all parents worthy the name want their children to succeed, to be happy. They can do much toward bringing about their desires by keeping before their children a vision of greatness. As parents we can talk in terms of excellence. The youngest of a family of five children says he owes what he is to the inspiration of his eldest brother, who was always talking about great things, about doing things in a big way, about being something "when I grow up." Just planting the seed in the admiring younger brother's imagination

caused him to grow up with a vision of great things. Parents can always drop a few seeds with their flowers. They can keep fine things before their children, perhaps not always the finest in material things, but certainly the finest in thoughts.

It is not so easy to watch the music that comes into the home, but no one will deny that it must be watched. It is possible to guard the books and magazines. Why not take a trip to see some beautiful building? There are the museum and the art gallery. Parents can do much, however poor they may be, to keep that vision of the good and the beautiful before their children.

First the child loves; then he imitates. Excellence of character can be presented through great men and women in history and literature. Out of interest I recently read some letters that had been written to editors of certain magazines for teen agers. I was impressed by the statements these young people made. Judging by the letters, I decided that these readers had had their thinking and acting influenced by the stories in those magazines.

In laying the foundation stones of social health, we have to admit the aid, both good and bad, of all kinds of teachers. The society that we live in—which, I suppose we might say, we make—has much to do with the shaping of our children's outlook on life. In this society we have schools, churches, magazines, all kinds of amusements, and all kinds of people. The home retains a strong place, because it has the child first, and during those most formative years. Nevertheless, the home cannot do it all; and, unhappily at times, it cannot do even what it would like to do. The outside pressure is too great.

Therefore we can see the injustice of laying all the blame of failure in teaching William or Susan to any one person or institution. By the time the Sunday school teacher has William and Susan, the "clay" may already be set, or may be in the process of hardening from some stronger competing force.

Nevertheless, God still works in mysterious ways His wonders to perform. What you and I, working alone, may fail to do, God with us may make possible. In laying the foundation stones of social health in our children, parents and teachers alike need the help of the great Architect.

The Family

The family is like a book:

The children are the leaves;

The parents are the cover,

Which protective beauty gives.

At first the pages of the book

Are blank and smooth and fair;

But time soon writeth memories

And painteth pictures there.

Love is the little golden clasp

That bindeth up the trust.

Oh, break it not, lest all the leaves

Should scatter and be lost.

—Author Unknown.



★ ★ PHILOSOPHY OF LIFE ★ ★

Burying Our Prejudices

By D. A. DELAFIELD

Most of us have a sort of "tongue in the cheek" attitude toward anything new. We are prone to laugh at innovations. Our prejudices blind us. When Orville and Wilbur Wright left their bicycle shop in Dayton, Ohio, to experiment with their 705-pound, fully loaded, homemade airplane at Kitty Hawk, North Carolina, and were successful in keeping it aloft for nearly one minute, no one believed that the time would come, forty-five years later, when a trip across the continent in a passenger plane would be as simple as a bicycle ride from town to country then. A humorous incident illustrates this. On December 17, 1903, the Wright brothers sent their sister in Dayton a wire which read, "First sustained flight today, fifty-nine seconds. Very happy. Home for Christmas." Upon receiving the telegram their sister went to the newspaper office, and the following morning a Dayton headline announced: "Local popular bicycle merchants will be home for the holidays."

That was all that mattered then—the holiday trip to Dayton. But this is nearly forgotten now, and the Wright brothers and their airplane, *The Flyer*, have become symbols of the new age of science and progress that has come to enrich every life.

The lesson is for you and me. Why form opinions in the field of health, science, religion, home, or politics in the mold of prejudice? Ask the question, "Do we have all the facts?" Wait until clear and sufficient evidence is presented to defend or condemn the issue. In this way we save ourselves the embarrassment of acting prematurely or the chagrin of waiting too long. The viewpoint of the truly great person is to live, learn, and see in every good enterprise a possible contribution to human happiness.

This does not mean that every new thing offered to us by science, religion, and politics is good for us. There are dreadful new things and wonderful old things, but before you reject them be sure that they will do you harm. This is especially true in the field of health. You may, when desperately ill, conscientiously refuse the attention of a physician because of a prejudice against doctors and their remedies, but this sort of conscientiousness will not revive you when you are dead. Better call the doctor and get his advice.

We have given two practical examples of how prejudice works. Stop and think of a few yourself. I dare you to sit down and discover your own prejudices and be absolutely honest about them. Then rise up manfully, go to the closet of your soul, pull out the ugly old skeletons, bury them, and make it a part of your philosophy of life that henceforth and forever there shall be no resurrection of those dead bones. The net results of this burial service will be the opening of your mind to vast stores of practical knowledge and truth that have been waiting to enrich your life.

The Dietitian Says...

Conducted by LUCILLE J. GOTHAM, Dietitian



This department serves as an aid to our subscribers in their dietetic problems. For information regarding some particular food or diet, address: The Dietitian, LIFE AND HEALTH, Takoma Park, Washington 12, D.C. Enclose stamped, addressed envelope for reply.

Whole-Wheat Flours

Are all whole-wheat flours really unbleached, undeckgerminated, 100 per cent unprocessed whole-wheat products?

A flour that is distributed widely, that is interstate, comes under Federal control as to standards; and if it is labeled whole wheat, it must be the entire grain with all the germ and outer coatings of the grain left in it. It may simply be called graham, and then it can contain white flour. If it is bleached, the label will mention it. A whole-wheat flour may vary in that it can be finer or coarser ground. Those troubled with constipation find a coarser-ground flour better, but those with a delicate digestive tract may need a finely ground flour. When buying other grain foods you will want to watch, for the label is very revealing. A corn meal labeled *degerminated* makes a very flat-tasting corn bread compared with a corn meal without the word *degerminated*, for this must contain the rich, vitamin-full corn germ.

Canned Milk and Undulant Fever

I should like to know if there is any danger of getting undulant fever from the use of canned milk or malted milk.

The simple precaution of pasteurizing milk destroys the undulant-fever germ, so canned milk and malted milk are safe to use. Butter, cheese, or ice cream made from unpasteurized milk would be possible sources of the infection. In the stores the butter is labeled, "Made of pasteurized cream," and some cheese is labeled likewise. It has been discovered that the mere handling of raw beef with the germs in it will result in the infection of the handler.

Diet Following Tuberculosis

I have been in a hospital for tuberculosis but am all right now. What would you suggest as to diet to prevent a recurrence?

Cod-liver oil for vitamins A and D is helpful in preventing recurrence.

There has been definite research to show that extra large amounts of vitamin-C-rich food, and especially citrus fruit, will help in cases of tuberculosis. Actual studies have shown that fruit is essential, so it would be wise to drink two glassfuls a day of fresh-squeezed orange or grapefruit juice, or an alternative as available, such

as tomatoes when in season, pineapples, or raspberries. In the tropics or semitropics mangoes or guavas could be depended upon, also papayas. These tropical fruits are richer than most fruits in vitamin C. You will also want to include a variety of whole-grain cereals, breads, fruits, vegetables, eggs, nuts, legumes, and dairy products. Attractive serving will make them more appealing and appetite stimulating.

Olives and olive oil are excellent, because they are a good source of essential fats. Six to eight olives could be eaten with every meal with good results.

What Foods Are Rich in Protein?

I would like to know how much protein there is in an egg, in a glass of milk, and in an average serving of other protein-rich foods. Also how much protein does a woman need daily?

Though their requirement of protein can be less, if adequate, it is generally felt that women need a minimum of sixty grams of protein a day. Men need seventy grams. Children vary in their requirement about as follows: one to three years, forty grams; four to six years, fifty grams; seven to nine years, sixty grams; ten to twelve years, seventy grams; those thirteen to fifteen years need eighty grams because of rapid body development; girls sixteen to twenty years require about seventy-five grams. Boys of thirteen to fifteen years need eighty-five grams; and those of sixteen to twenty years need one hundred grams to develop fine physiques. The amount varies to some extent, according to size and weight. A generous bill of fare with a normal appetite may result in a person's having enough protein. Many, however, fail to eat enough. A lack of vital protein may result in anemia and general body weakness, with lowered resistance to infection. At this time it would probably be a good plan for you to write down what you ate yesterday or today and give the amount. Then compare your intake with this protein chart, and see how near you came to having a complete protein ration. According to some authorities, extra protein results in more buoyant health. It is now known that those who have had accidents, surgical operations, serious burns, or wasting diseases need several times the usual amount of protein to hasten con-

valence. You will notice that the chart calls some foods complete protein foods and others incomplete. The complete protein foods are more valuable nutritionally, but the others are good. It has been suggested that, when possible, about half the protein ration should be made up of the complete protein foods.

HIGH-GRADE PROTEIN FOODS

Milk	Grams
Buttermilk (8 ounces or $\frac{1}{2}$ pint)	8.4
Condensed (5 tablespoons)	8.1
Dried skim ($\frac{1}{2}$ cup)	11.8
Dried whole ($\frac{1}{2}$ cup)	8.6
Evaporated ($\frac{1}{2}$ cup scant)	8.8
Skim—fresh (1 cup or 8 ounces)	8.4
Soy milk (1 cup or 8 ounces)	8.5
Whole milk (1 cup or 8 ounces)	8.4
Cheese	
American, fresh, pasteurized, grated ($\frac{1}{2}$ cup)	7.0
Cottage ($\frac{1}{2}$ cup)	9.6
Cream (2 rounded tablespoons)	6.0
Soy cheese ($3\frac{1}{2}$ ounces, or $\frac{3}{4}$ -inch slice)	9.0
Eggs	
Whole egg	7.0
Egg white	4.0
Egg yolk	3.0

INCOMPLETE PROTEIN FOODS

Cereal Foods	Grams
Whole-wheat bread (1 slice)	2.7
White bread (1 slice)	2.2
Ready-to-eat or hot cereal (average 1 ounce)	7.1
Macaroni and cheese (1 cup)	11.9
Noodles ($\frac{3}{4}$ cup)	4.3
Wheat germ ($\frac{1}{2}$ cup)	10.0
Gluten, meat substitutes ($3\frac{1}{2}$ ounces)	app. 17.0
Nuts	
Almonds (10 to 12)	2.7
Brazil (2)	2.2
Peanuts (16 to 17)	4.0
Peanut butter (1 tablespoon)	3.9
Pecans (12 halves)	1.4
Walnuts ($1\frac{1}{4}$ tablespoon, chopped)	2.3
Yeast	
Brewers' (1 tablespoon)	4.6
Legumes	
Beans—baked ($\frac{1}{2}$ cup)	6.0
Limas—dried or cooked ($\frac{1}{2}$ cup)	6.2
Beans—kidney, pinto, or pea ($\frac{1}{2}$ cup)	6.0
Peas—dried, split ($\frac{1}{2}$ cup)	7.4
Peas—fresh ($\frac{3}{4}$ cup)	6.7
Lentils ($\frac{1}{2}$ cup)	7.4
Vegetable	
Potato (1 medium large)	3.0

Some Japanese research seems to show that nuts may be a complete protein food. Wheat germ and brewers' yeast also have high biological value.

SEEKERS after wisdom are advised by King Solomon, the wisest man who ever lived, to go to the ant. Seekers after long life are advised by modern chemistry to go to her sister insect, the bee.

The vitamins in the royal jelly, the infant pabulum on which the hive's queen mother is reared, accounts not only for her being a queen instead of a common worker but also for her extraordinarily long life expectancy as compared with the workers' three months. These interesting facts were revealed by Dr. Thomas S. Gardner, industrial chemist of Nutley, New Jersey, to the American Chemical Society at a meeting in New York.

How Good Is

HONEY?

By *DELLA A. REISWIG, M.A.*

DIETITIAN

U. S. DEPARTMENT OF
AGRICULTURE

Four vitamins have been identified in royal jelly, Dr. Gardner stated. They are pantothenic acid, pyridoxin, sodium yeast nucleate, and biotin. Each alone has more or less effect in prolonging insect life, but their interactive effect when taken together seems to be much greater than the simple sum of their separate effects.

Because royal jelly is only for aristocracy, we are still far from becoming Methuselahs. Vitamins in common honey can hardly be detected. Six micrograms of thiamin, sixty micrograms of riboflavin, and five micrograms of vitamin C in four tablespoons of honey are not very much.

Honey contains small amounts of minerals too. One tablespoon of honey may contain one milligram of calcium, three milligrams of phosphorus, and two-tenths milligrams of iron, besides smaller amounts of magnesium, potassium, sodium, chlorine, and sulfur. These elements are present in such minute amounts that we cannot depend upon honey as an important source of these minerals in the diet. Their presence is important, however, because of the vital role they play in burning this sugar in the body.

Honey, like most other sweets, is an energy-producing food. The chemical composition of honey varies considerably, depending on the material the bees have to work with. On the average, three fourths of honey is sugar: chiefly two simple sugars called levulose (fruit sugar) and dextrose (grape sugar). Honey contains only a small quantity of sucrose (cane sugar)—less than 2 per cent.

Extracted honey is about one fifth water. If it were not for this, a pound of honey would have practically the same energy value as a pound of granulated sugar; whereas the honey has about one fifth less. Measure for measure, however, honey yields more energy than sugar, for it is heavier. For example, one and a half tablespoons of honey weigh a trifle over an ounce and will furnish the body one hundred calories. The same amount of energy would be supplied by nine tenths of an ounce, or two tablespoons, of sugar, by one and a quarter ounces, or one and three-quarter tablespoons, of molasses, or by a little less than an ounce of most preserves.

Cane sugar is a complex sugar devoid of all vitamins and minerals. In fact, even bees cannot put life-giving properties into our refined granulated sugar, for if this form of sugar alone is given bees to reproduce and live on, they die.

Now, even though honey has its advantages over cane or granulated sugar, that does not give us license to overdo the honey. Moderation is a wonderful virtue whether it is honey or cane sugar we are using. The research group at the School of Dentistry, University of Michigan, states that the "bacteria which act upon the sugar do not discriminate between natural sugar and refined sugar. The natural sugars are fermentable and as a result are a possible source of danger to the teeth. However, in the natural state they are less concentrated and the individual is not likely to consume excessive amounts. Candy and syrups prepared from natural sugars such as maple products do contribute toward tooth decay the same as refined sugars."

Aromatic substances give honey its characteristic flavor. Because the nectar from which honey is made comes from the flowers, there is a great variation in the quality of the product, depending upon the kind of flowers from which it comes. The volatile oils which make the perfume of the blossoms also give it its flavor.

The perfume of some flowers is delightfully pleasing, and some is strong and unpleasant. So, some kinds of honey emit a delightful flavor, and some are strong and distasteful. But this variety only adds to the interest. It is fortunate for us that we are not all pleased with the same things. Some folks like sour apples, and others prefer sweet. Some palates are pleased with the mild honey

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AS A school physician I have, for years, been concerned with the health of both pupils and instructors. This afternoon Miss Weary Teacher sits by my desk as the tears well up in her eyes and fall softly down her cheeks. "Doctor, I can't go on. I am exhausted. I go home and go to bed, but cannot sleep. For no real reason I cry and cry. Oh, I am so weary."

Mr. Tired Schoolman looks at me sadly and says, "I know there is nothing organically wrong with me, but I feel I cannot stay on the job another day. I have no energy. I am constantly tired."

Again and again I hear the complaint: "I am exhausted; I am completely worn out." Of the



CHARLES CAREY

TIRED OUT?

Here are some causes for that all-gone feeling.

R. HARRIETT B. RANDALL, M.D.

teachers I have seen this year, I am sure, in reviewing their cases, no other symptom has been so frequently mentioned as fatigue. In a recent hospital staff meeting the lecturer alluded to the fact that almost all patients coming to his office complained bitterly of weariness. Other physicians attest to the same fact.

But we should differentiate between the well-earned tiredness that everyone may experience at the end of a busy day, and that devastating fatigue which never leaves, and is often more profound after a night's rest than it is when one is "warmed up" to work near the end of the day.

Mild fatigue is the normal body reaction to effort. The person who always goes in "high," who never feels an ebbing of the energies or a lessening of the daily drive, should probably have his blood pressure checked before he "bursts a blood vessel." We need normal fatigue for satisfying sleep; it is the safety mechanism that regulates and keeps physical and mental effort in bounds.

What is the mechanism of fatigue? Physiologists tell us that, in the accomplishment of muscular work, certain fatigue products accumulate in the muscles, and that these are removed by the circulation during the period of muscular relaxation. Improved circulation, therefore, speeds the relief of fatigue, and, conversely, impaired circulation and insufficient rest slow this process. Again, muscle and nerve cells gain their nutrition, their energy supply, through the circulation, largely in the form of glycogen (blood sugar). Blood sugar comes from food. That is why a breakfastless morning is usually a weary one. I could go on and on discussing the

various phases of nutrition and fatigue, but that is not the purpose of this article. Suffice it to say that muscle and nerve cells are not restored to normal function without adequate nutrition.

After one has found that his habits of work, rest, and eating are compatible with comfortable living, then he should search further into the cause of his exhaustion if it still persists. All correctable body defects should be found and treated. Very frequent among the causes of exhaustion are glandular imbalance, an underactive thyroid—so simply improved with thyroid substance by mouth; waning functioning of the sex glands, common to all persons of middle years, and so often amenable to treatment; and all the other malfunctions our glandular systems may have and which may produce fatigue.

The blood count, especially in this day of much sulfa dosage, should be checked to make sure whether it is normal. That focus of infection—perhaps that gold crown sitting serenely on a dead tooth, or a chest condition you don't know about that is making steady headway, or an underfunctioning digestive system—may be keeping you slowed down. You cannot afford not to be sure about such things.

But suppose one's nutrition, rest, work, and body functions are all within normal limits, but fatigue is beyond these normal limits—then what?

We need now to look into the emotional life—the anxieties, the tensions, the conflicts, the

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NUTRITION is a process related to more than the content of food; hence one asks, "What is nutrition?" Lusk said that it was "the sum of the processes concerned with growth, maintenance, and repair of the living body as a whole or its constituent parts."

There are outward expressions of nutrition that are apparent to the careful observer. Vitality and the general appearance of the skin, hair, eyes, and facial expression spell good nutrition or the graded deviation from the same. One expects to find clear skin, hair with luster, sparkling eyes, a happy, radiant disposition expressed through the countenance of one who is filled with vitality.

Posture and the skeletal development are marked by well-formed bones, good occlusion of the teeth, tight gums, and a well-shaped jaw. The bones and framework are strong and well built.

The muscles of those getting the proper amount of exercise are well developed and strong. This is evidenced by their size, firmness, and symmetry. The posture is erect, and shows the adequate development and proper balance of the various muscles. The head is erect and well balanced. The chest is up, and the shoulder blades are flat. The chest leads the abdomen.

The appetite and digestion are good; elimination is based on habits well formed; and seldom is there evidence of stomach or intestinal "uprisings." Bodily functions and reactions to normal everyday buffetings are under the control of a developing and enlarging personality. The nervous system is stable. Fatigue does not occur easily. Sleep is sound, wholesome, and refreshing.

The body of the well-nourished individual has a good blood supply, which, in turn, gives a pink glow to the cheeks, lips, and complexion. The skin glows after exercise, or activity. Defects that are remedial have been corrected, and direction is given for the improvement of those things that the doctors observe. The "alive" person takes an interest in things.

Ears of corn are graded. The blade, then the ear, may each be perfect in its development, and so may the individual child or adult. Some of the means for measuring or judging the health condition are appearance and posture, studies of growth and development, height and weight for age, visual and hearing tests, physical-fitness tests, achievement tests after physical education training, health inventories, a physician's physical examination and appraisal of nutritional status, and a survey of the cumulative health record kept by school or employer. A healthy condition is the interpretation of all the evidences given.

Good nutrition implies nutrition adequate for normal growth and development of all parts of the body. Health is based on a solid foundation of health facts, principles, attitudes, and activity. It is more than just what one eats, although

that may contribute to a maximum in making health possible. Health is built into an individual. The health examination will do little good unless one corrects faulty habits that are producing ill-health.

Stare and Davidson, in the *Journal of the American Medical Association*, state: "Good nutrition for an individual implies that he receive and utilize a suitable metabolic mixture of all substances necessary for health. This can be obtained only from food selected, processed, prepared, consumed, absorbed and utilized so that it furnishes in optimal amounts the individ-

ual's essential nutrients. Such a diet must contain protein, fat, carbohydrate, certain minerals and vitamins, and water in optimal amounts. The optimal allowance which is recommended for each nutrient should be much greater than the minimum requirement for that nutrient. That is, provision must be made not only for actual requirements but also for variations from the 'normal' both in health and in disease, for the accumulation of some 'reserves' and

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FOODS, FANCIES, and FACTS

SOME FUNDAMENTALS ABOUT NUTRITION

By Alfaretta C. Johnson, M.S.

DIETITIAN



EWING GALLOWAY

Is It Anything Serious, Doctor ?

▲ HENRY W. VOLLMER, M.D.

YOUR physician, in making a physical examination of you, will give study to your circulatory system, the heart and blood vessels. The blood vessels are often spoken of in medical parlance as the peripheral heart, and the heart itself as the central heart. It is thus referred to for convenience and differentiation in dealing with disease of the circulatory system. Modern invention has placed in the hand of the physician, instruments or devices for making accurate measurement of certain factors pertaining to the examination of vital organs, factors about which he was formerly forced to guess more or less. With the sphygmomanometer—an instrument made up of an inflatable rubber bag, a bulb for inflating the bag, all connected by rubber tubing with a graduated glass tube containing mercury—your physician can measure the blood pressure when the heart is contracted and when it is relaxed, or at rest. The former is the systolic pressure, and the latter is the diastolic pressure. The relation of the one to the other gives definite information to your doctor regarding your circulatory system. We speak of the average normal blood pressure for the adult man as 120 systolic and 80 diastolic; for women it is five to ten points lower.

Change in blood pressure, either an increase or a lowering, is not necessarily a disease entirely in itself. It is a sign, or symptom, of certain diseases. A low blood pressure may be due to one of several causes: anemia; general run-down condition; glandular disturbance, such as disease of the thyroid and adrenal glands; lack of exercise; faulty diet; weakening or failing of the heart muscles; pressure on the vital centers in the brain due to hemorrhage, injury, or a brain tumor. On the other hand, increase in blood pressure may be caused

by one of many things. Among these are worry and other forms of nerve tension; infection; dietary errors; overeating; use of coffee and tobacco; arteriosclerosis, or hardening of the arteries; organic disease of the heart or kidneys; and, in some instances, certain hereditary tendencies. It is the physician's responsibility to determine which one, or more, of these factors enters into the cause of the disturbed blood pressure, be it high or low, and of what disease it is a symptom. This may require careful search and study on the part of your physician.

Fortunately the blood pressure furnishes your physician valuable information from which he can draw conclusions. The increase in blood pressure is one of the early symptoms of serious organic disease of the kidneys, blood vessels, or heart. This again emphasizes the importance of periodic health examination.

Though it is true that, as a rule, increase in blood pressure is a symptom and not a disease in itself, this increase may be a factor in causing disease in the heart or the kidneys or in both. In the case of the heart, abnormal rise in the blood pressure necessarily increases the work of the heart, and if long continued, will damage the heart itself. Also when increase in blood pressure is due to disease of the arteries, the arteries that supply blood to the heart muscle itself are also affected. Likewise, the arteries to the kidney structure may be affected, and the delicate cells of the kidney tubules damaged. This hampers the work of the kidneys in the elimination of the waste products. It is not unusual for the three vital organs—the heart, the blood vessels, and the kidneys—to be affected at the same time. This condition is spoken of as cardio-renal-vascular disease—a disease very common today, and one that is taking an ever-increasing toll, especially in the middle decades of life. A great deal might be done to prevent this disaster if men and women were willing to live in harmony with the laws of life.

The character of the pulse will be noted with regard to rate, regularity, and tension. This conveys information as to the general condition of the patient, as well as to the condition of the heart and arteries.

And now attention will be given to the heart itself. First the physician will note, by observation and touch, the position of the apex beat of the heart. If it is found to be misplaced, it will suggest to the doctor the possibility of a rare congenital condition, the possibility of tumors in the chest cavity, or fluid in or about the lungs or heart. By means of percussion over the chest and heart area, the position and size of the heart are further estimated. In early times the doctor listened to the heart sounds by placing his ear over the heart area. Later various crude instruments were made available for this purpose. Today we have the modern stethoscope by

**"Our national health
is physically our greatest
national asset."**

—Theodore Roosevelt.





O. KAUFMANN & PARRY

Heart Sounds Are Transmitted to the Doctor's Ear by the Modern Stethoscope

(**"BETTER SEE
THE DOCTOR,"**

**Article No. Two
in This Series)**

disease caused by a specific infection. This may come from diseased tonsils or other infected areas of the body. Secondary causes may be dietary insufficiencies and unhygienic clothing. The modern fashion, which allows children to go out even in cold weather with the lower extremities scantily clothed or not clothed at all, is to be condemned. The following excerpt from an article entitled "Rheumatic Heart Disease," by a nationally known writer and lecturer, Dr. Edward L. Bauer, which appeared in *Hygeia*, places emphasis on this fact.

which heart sounds are transmitted to the ear. More recently electrical instruments have been devised by which the heart sound can be greatly amplified.

But you ask, "Why does the doctor listen to my heart? What does he find out?" Certain heart sounds are heard normally at regular intervals during the stages of contraction and relaxation of the heart muscle. These sounds are produced by the heart muscle and by the valves of the heart. The doctor has learned to recognize the normal heart sounds and their regularity. He also recognizes abnormal sounds. He has learned at what stage in the heart cycle certain sounds occur, and what produces these sounds. Normally there are two distinct sounds occurring regularly. Thus by noting at what stage of the heart cycle these abnormal sounds occur, he is able to determine which valves of the heart are affected and something of the nature of the affection. The tone of certain sounds suggests to the doctor something as to the strength of the heart muscle. By means of a more modern invention, the electrocardiograph, more detailed information may be obtained regarding the condition of the heart. This instrument is especially useful in determining the condition of the coronary arteries—the arteries which supply the heart muscle itself with oxygen and nourishment. Coronary heart disease is a common cause of death today, and is on the increase. This increase may be accounted for by the fact that more people are living to middle age. Physicians also recognize that there are other causes of coronary diseases as well, such as the use of tobacco and other poison habits and the strenuous nerve tension under which so many are laboring today. Modern instruments of precision have made it possible to diagnose the condition more readily.

Today more and more cases of rheumatic heart are being reported, especially among children. This is a form of heart

"The universal use of heating systems has played a large part in changing the weight and material of clothing. Once the fashion of lighter and less clothing was adopted, the pendulum swung to the extreme. Children particularly have been made to bear the brunt of this obeisance to fashion to such an extent that their health is distinctly jeopardized. In younger children the chest is often well covered, but from the groin to the ankle they are nude. Nature is poorly prepared for this sudden chilling and in spite of the enthusiast's contention that hardening produces good health the real results are lowered resistance, increased metabolism and an increased tax on the heart and heart centers. This occurs at a time when such energy could better be expended on growth.

"Children's legs should be covered with cotton or lisle stockings. Dresses should be of knee length and trousers of the 'knicker' type. For outdoor play in winter, additional garments should be looser and without inhibition about the hips and shoulders. For example, girls should be dressed either in pantaloons leggings without being stuffed with skirts, or they should wear leggings that come above the knees and warm dresses without the pantaloons. Loose-fitting sweaters are better than coats. Boys should wear either corduroy knickers and woolen stockings or long trousers, with sweaters and parkas or lumber jackets substituted for coats, vests and overcoats. Stockings should always cover the knees."

The breasts, especially in women, are carefully checked to detect the presence of tumors. These tumor masses should always be removed because of the possibility of cancer. We know that cancer is still taking an increasing toll of human life. The usual procedure is to remove the tumor; and by a process of freezing and staining, a portion of the tumor is immediately studied under the high-powered microscope to determine whether cancer cells

(Turn to page 31)

NO PIECE of machinery is so intricately complicated and finely adjusted as the human body. Yet many people who would not trust their automobiles in the hands of any but a skilled mechanic, will tinker with their own bodies when they are out of order. Or, what is equally bad, they will take a neighbor's pet prescription, though that neighbor may know nothing about the malady that needs treatment.

First of all, the untrained person is incompetent to make a reliable diagnosis. Pain in the abdomen may be due to gravel from the kidney or to gallstones or appendicitis, or it

Dangerous



may be simple intestinal colic. Pain is a call for diagnosis, ascertaining the cause, not for a painkiller. If the pain is due to gravel, operation is not indicated; if due to simple colic from improper food, a cathartic may be indicated. But if the pain is caused by appendicitis, cathartics are dangerous and often fatal. An ice bag may be helpful; but, after all, appendicitis needs surgery, a surgeon's diagnosis and operative skill. These, however, are only a few of the causes of abdominal pain; therefore, much knowledge and diagnostic skill are required.

Blood with the stool may be from piles, cancer, or even from ulcer or other diseases. To go to a drugstore and ask for a pile cure without first going to a physician for a diagnosis may result in overlooking a cancer, and so, with ignorant self-diagnosis and self-medication, result in delay, and delay in death.

Many other examples of easy confusion of diseases without skilled examination might be given. The whole realm of diseases is full of them. But the dangers of self-diagnosis are followed by the dangers of self-medication, for a large number of drugs are harmful, poisonous, and if used at all, must be used only in a very restricted field, often only for a single disease.

This phrase "the practice of medicine" is, of course, an old one, and comes from the days when medicine was considered the chief means of treatment for the sick. It still clings, though it has well outgrown its name. Today of far greater importance and greater benefit, without poisonous effects, are the use of hydrotherapy (hot and cold water in various ways), fresh outdoor air, sunshine and sunlamps, massage and electricity, with rest or exercise as indicated at the time. Collectively these means are known as physical therapy, and are now beginning to be taught in regular medical schools. Of course vaccines, serums, antitoxins, ductless-gland extracts, and vitamins are all nature's own means, and, therefore, are physiologic and rational when appropriately applied. Some diseased organs or parts of the body may need to be removed, and so surgery is the rational and necessary means of treat-



A. G. K.

Shunning the Pitfalls of S

ment. Unfortunately both radium and X-ray are capable of doing harm as well as good. They are not treatments that can be given without a very careful study being made by the doctor. Nature's means of restoration are versatile, comprehensive, and, if used understandingly, are not harmful—that is, they are not intrinsically poisonous.

The great majority of drugs produce damage to one or even many parts of the body. Through the years there has been a continuous procession of these poisonous, or toxic, drugs. The medical profession has discarded them as one after another has proved more harmful than beneficial. There are still some poisonous drugs used to kill parasites, intestinal worms, and so forth, that may have to be used because no other ways of ridding the body of them are known. However, many common infections such as pneumonia, influenza, bronchitis, the common cold, blood poisoning (lymphangitis), arthritis, and rheumatism are all helped by hydrotherapy, and in some instances with much quicker recovery than by drugs alone. They produce no damage to any part, organ, or function of the body. A brief survey of drugs once popular and of those now in vogue will show how their supposed benefit has nearly always been because of insufficient knowledge.



OTT, M.D.

diagnosis and Self-medication

For many years strychnine was regarded as a valuable stimulant and tonic, often combined with iron and quinine, and was given for all sorts of run-down conditions. It was considered a specific for surgical shock and heart emergencies. In 1903 Dr. George W. Crile, after most extensive animal experiments, wrote: "After giving the strychnine, the animals not yet in complete shock, always passed into a deeper degree of shock. In any degree of shock, after the administration of a therapeutic dose of strychnine, the animals passed into deeper shock. Later in the research it was found that the most convenient and certain method of producing shock for experimental purposes, is by the administration of physiologic doses of strychnine." Another noted medical authority has said, "Dosing with strychnine to the heart is like kicking a dying horse when he is down."

Quinine is nearly a specific in destroying the malarial parasite, and is successful in the great majority of cases. Its wide use in colds and pneumonia is, however, never justified; and in all germ infections it is highly detrimental. It damages, paralyzes, or destroys the white blood cells, which are our chief means of protection in by far the majority of infectious diseases. Elie Metchnikoff, the great Russian bac-

teriologist, says: "But it is not only opium and alcohol which hinder the phagocytic (germ-destroying) action. A number of other substances regularly employed in medicine cause the same results. Even quinine, the . . . effect of which in malarial fevers is indisputable, is a poison for the white blood cells. One should . . . avoid as far as possible the use of all sorts of medicaments, and limit oneself to the hygienic measures which may check the outbreak of infectious disease."

Arsenic was long used, and is still used, by some for anemia. The fact of the matter is that it produces anemia by damaging the blood-forming organs.

Drugs



Forty years ago coal-tar medicines were much used for fevers and headaches, and as pain relievers. Fever is lessened by the poisonous action of these drugs on the heat centers, and the processes of oxidation in the body. They depress the heart action. They cause breaking up of the red blood cells, and damage the hemoglobin, so that it cannot carry the necessary amount of oxygen from the lungs to the tissues of the body. The blood-forming organs are also damaged, so that the white blood cells, which protect us against acute infections, are diminished, germs multiply rapidly, and illness with fever results. The harmfulness of these medicines (acetanilide, phenacetin, and amidopyrine), at one time sold widely as headache relievers, is now well known to physicians.

Next, after the earlier coal-tar drugs, came a whole group of pain relievers recommended for rheumatism and arthritis. The most widely used of this class was atophan, but they all contained cinchophen or some derivative. After a few years cases of hardening of the liver (cirrhosis), from the poisonous action of these drugs, began to be reported. Then came reports of cases of acute degeneration of the liver, most of which were fatal.

Barbital was introduced in 1903, and the barbituric-acid group of drugs is widely used. They are all sedative or nerve quieters and sleep producers. There are forty or more on the market under all sorts of names. Among these the amytals are widely used. They are not the harmless sleeping potions they are supposed to be. Actual damage in the brain and nerve tissues occurs, and many disabilities and distresses result, not the least of which is a mental depression and hopelessness occurring with prolonged use. Dr. Webster in 1930 wrote: "As was to be expected, many cases of untoward effects or actual poisoning arose as a result of over-dosage or accident. . . . Many reports of chronic poisoning are finding their way into literature, owing to the fact that elimination of the drug is slow, and cumulative effects are prone to arise."

Barbital is definitely habit forming. Dr. Work reported one hundred cases of barbital poisoning seen at the Denver General Hospital and in his private (Turn to page 33)



Planting Your Garden

WHEN you plant your garden there should be no vacant patches. All available space should be utilized right through the season. This benefits the soil, as well as increases the yield.

Be sure to draw a plan for your garden before you do any planting. Plan your crops so that small, quick-maturing varieties such as radishes and lettuce can be grown between tomatoes and other slower-maturing crops. By doing this we increase the yield from a small garden, and by cultivating two crops at the same time we save much labor.

A series of planting dates for the various vegetables and flowers might be given, but the weather does not pay much attention to these dates. Watch the trees to learn when to plant. When the willows leaf out and the cottonwoods are in bloom, it is time to plant onions, early peas, early potatoes, and gladiolus bulbs, and to set out perennial plants that are hardy to cold weather. You can set your pansy plants out at this time. When oak leaves come out it is time to plant snap beans, radishes, parsnips, beets, carrots, and, in fact, all but the most tender vegetables and flowers. The old rule was, "It is safe to plant the early garden as soon as the oak leaves are as big as squirrels' ears." Do not set out tomato plants or other tender plants or seeds until the oak leaves are big enough to cover a half dollar. Such a planting calendar may not sound very scientific, but it works, whether we have an early or a late spring.

The sooner you give your seedlings living room, the bigger and better the crops will be. Thin and pull out all weeds growing in the row as soon as they are big enough to handle.

There is usually enough moisture at spring planting time to bring up the seeds and keep the young seedlings growing, but this is not always true.

When in doubt, do not water! But if your plants are really in need of water, apply enough to wet the ground to a depth of six or eight inches. Use sprinkler with fine spray on your seedlings. Do not drown them out. Cover the hose nozzle with a cloth bag, and lay between the plant rows. When the ground is well watered, drag the hose to a new place. This saves long hours of standing and holding the hose.

In fact, you can now buy garden hose made of strong heavy cloth, which, when filled with water, allows it to seep out the full length of the hose. This saves water, which is lost by evaporation.

Do not buy plants to save time; grow your own if possible. In these days most

people buy cabbage, broccoli, pepper, tomato, and celery plants; and as a result millions of plants are shipped every year from the deep South to all parts of the North. Because of careless growing, many of these plants are diseased. This is especially true of cabbage and tomato plants. If you do not have time or facilities for growing your own plants, buy only home-grown ones if it is possible to do so. They may cost a little more, but they are not so likely to be diseased. They are much more vigorous, and grow more rapidly than plants that have been shipped over the country for two or three weeks. We might add that so far onion plants have not to any considerable degree carried diseases from the grower to the plant purchaser. We believe that the onion plants are generally more satisfactory than are sets, except for green bunching onions. Because of this, there will always be a big demand for both onion plants and onion sets.

Because many people do not know which plants are tender, we mention a few of them. The following should not be set out until warm weather has definitely arrived: Tampala, vine crops, Lima beans, tomatoes, peppers, eggplant.

In fighting insects by the use of various sprays and dusts, we sometimes do more harm than good. Do not use sulfur, especially in the dust form, on any of the vine crops, such as cucumbers or cantaloupe. Sulfur is likely to do them much harm. Instead, soak the seed in kerosene overnight before planting. This will not prevent germination, but it will render the plants distasteful to practically all insects, although it will not, in any way, affect the fruit. Do not soak these seeds longer than twelve or fifteen hours before planting; and, of course, they should not be allowed to get dry before planting.

Repent what's past; avoid what is to come;

And do not spread the compost on the weeds,

To make them ranker.

—Shakespeare.

Lima beans are semitender plants, so wait until the leaves on the trees are well out before planting them. Pole Limas mature in about eleven or thirteen weeks, and they bear until frost. Pole beans require strong poles eight or nine feet tall. Be sure to set the poles at least a foot deep before planting. Plant beans one-half inch deep, with eyes down, three or four beans to a pole. It is highly important to set the bean on edge, with the eye down, to prevent its pulling its head off when it tries to come up. This applies to all varieties of Lima beans. Bush Limas bear about ten days sooner, and may be harvested until killed by frost. They are easier to plant, cheaper to cultivate, and just as prolific.

The old standard varieties of vine crops

rambled all over the ground, and took too much space from the small garden. Now we can get bush varieties of cucumbers, muskmelons, pumpkins, squash, and sweet potatoes. These vineless varieties can be planted as close as two and a half feet to each other, and will produce just as good fruit as the old vining varieties. All vine crops are very sensitive to cold, and should not be planted until the weather is quite warm.

Broccoli takes space; but, being an all-season crop, it will supply you all summer and into the fall. It is easier to grow broccoli than cauliflower. Six plants will supply a small family. Like cabbage, cauliflower, and other members of the Brassica family, broccoli should be protected against root maggots when set out. This may be done by spraying them with some mixed spray containing DDT. As a result your plants will be healthier.

Most of the Brassica family, and especially cabbage, like sweet soil. If your soil is sour, put a little hydrated lime into the soil around each plant. If the plants, especially the leafy crops, are not growing well and seem to need a tonic, give them a side dressing of a complete garden fertilizer. In other words, spread a band of fertilizer down each side of the rows a few inches from the plants and rake it into the soil. If you have prepared your soil properly before planting, you will seldom need to side dress your plants.

Speed, Spice, and Scotch

(Continued from page 7)

pressure, small blood vessels within the wall of the stomach constrict, shutting off a good circulation of blood to the stomach lining.

With the pepper pot brewing extra stomach acid, we have a perfect setup for peptic ulcer formation. The stomach lining is blanched and weakened by lack of blood; pepper, or condiment, irritation brings excessive acid to gnaw at the weakened spot. Erosion and ulceration may follow. If your physician discourages condiments in the diet, he knows whereof he speaks. Be wise. Follow his advice religiously.

The intestinal tract is no more pleased to see this noxious intruder, pepper, than your stomach is. It becomes highly incensed. Normally, foods are digested to liquid form, then absorbed into the blood stream via fingerlike intestinal projections called villi. But pepper and other condiments are not true foods; therefore, the blood stream wants no part of them. The little villi gladly accept breakfast eggs, but balk at taking in the "black villain" as a fellow traveler. Because pepper inflames and produces congestion in the villi, some of this "hot stuff" sneaks through.

The blood stream hastens to rid itself of the pepper by shunting it to the kidney or to the sweat glands in the skin.

Delicately thin kidney capsules filter blood to form urine. These capsules, or glomeruli, may be so excited over this insulting blood passenger that they may open up small chinks in the kidney lining to give rapid exit to the pepper. In so doing precious blood elements may leak through these openings. Albumen and even red blood cells have been known to pass through the kidneys of persons who are highly sensitive to irritating condiments.

Drinking does not drown your sorrow
—it only irrigates it.—Denver Post.

The sensitive person may suffer a skin rash, hives, and itching. Some of the pepper seeks escape via sweat glands.

Farther downstairs the large bowel finally receives the residue of eggs and pepper. The intense irritation caused here produces spasm. A spastic bowel is a stubborn bowel—the balky bowel showing itself in a form of constipation. Persons not accustomed to highly seasoned foods often suffer constipation after overindulging in the prize dishes of a Spanish kitchen.

Scotch or alcoholic beverages have an effect on the stomach and intestines similar to spices—only worse. Remember how a little cut painted with tincture of iodine smarted and stung? That was alcohol biting cut nerve endings in the skin. It has the same ability to bite taste buds, erode stomachs, irritate kidneys, and fog brains. It benumbs taste buds even more than spices. Unscrupulous restaurants are aware of this. If they can divert the customer to the bar long enough, he does not know, and cares much less, whether their food is any good. To really enjoy your food, don't dull your sense of taste with spice or Scotch.

Yes, the doctor was right. *Speed, spice, and Scotch* stand for faulty living habits.

For a sweet stomach, good disposition, and sound sleep, omit the sins against the stomach. Don't let "faulty habits" be your diagnosis. Don't let *speed, spice, and Scotch* deprive you of good health.



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HOME TREATMENTS



Hot Packs for Infantile Paralysis

By Stella C. Peterson, R.N., B.S.N.E.

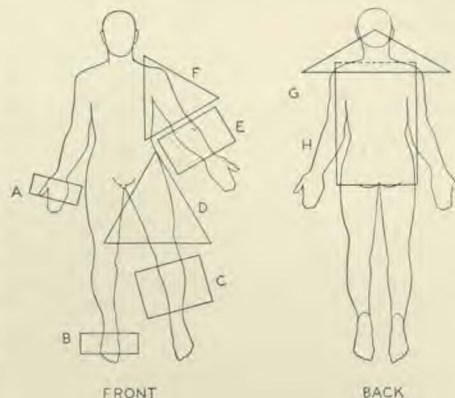
In many cases of infantile paralysis, treatment must be continued over a long period of time; therefore, it often becomes necessary for some member of the family to learn how to apply the hot packs, and possibly even give muscle exercise to the patient at home. In many cases the patient is not taken to the hospital, but must be cared for at home even during the time of quarantine. It is especially important, then, that someone in the family learn how to apply hot packs.

Hot packs are given to relieve the pain and discomfort of aching muscles resulting from spasm. This spasm is due to poor circulation and a lack of fresh oxygen for the muscle cells. The moist heat applied to the skin increases the circulation and the supply of oxygen. Thus the spasm is relieved.

We know that the virus of infantile paralysis attacks the nerve cells in the spinal cord; and if severe, the nerve cells may be destroyed. But there are also present a swelling and a congestion in the tissues around the nerve cells. Thus they do not receive an adequate circulation and adequate oxygen. The hot, moist packs applied to the skin relieve the swelling and congestion in the spinal cord by derivation and also by hastening

the circulation in the cord. As a result fresh oxygen is brought to the nerve cells. In some cases, when the swelling and congestion have been relieved, the nerve cells become active again, because they have not actually been destroyed by the virus. It becomes important, then, to apply heat in some form, preferably moist, as soon as the physician has made the diagnosis, so that, if possible, the destruction of nerve cells by the virus may be lessened. We must remember, however, that the hot packs do not actually destroy the virus.

Hot packs may be given in two different ways, as pin-on and lay-on packs. Each method has distinct advantages. The pin-on packs are separate packs cut to fit each area of the body and pinned in place. This is an advantage, because muscles can be treated which otherwise would be



Areas Where Kenny Packs May Be Placed to
Relieve Muscle Spasm

difficult to treat satisfactorily with lay-on packs. The lay-on packs are effective when concentrated or intensive packing is desired. The packs should be changed every ten to fifteen minutes for one hour. Lay-on packs may be applied to the back and the backs of the extremities while the patient is lying face down. Then they may be called prone packs.

Kenny pin-on packs are made up of three parts, because the moist heat is applied directly to the skin surface. The hot pack is then covered with oiled silk or other waterproof material, and a third layer of wool is pinned in place to retain the heat. The illustration shows how they should be cut to fit. The inner layer should be of double thickness. Blanket material of half wool and cotton is good material. Other materials such as old woolen underwear, wool from paper mills, or army blankets may be used.

ARTICLES NECESSARY

1. Pack material cut to fit areas to be treated.
2. Waterproof material cut to fit.
3. Material for outer layer, or cover.
4. Breast binder.
5. Abdominal binder (may be made of muslin or a hand towel).
6. Loin cloth.
7. Brassiere or halter for women patients.
8. Safety pins.
9. Forceps or tweezers to pick up hot packs.
10. Wash boiler, large covered kettle or roaster, or hot plate and kettle.
11. Hand wringer and tub or washing machine wringer. (Turn to page 34)

The Housewife's Corner

Conducted by CAROLINE EELLS KEELER

Homemaking—A Career Packed Full of Adventure, Love, and Work

Please enclose a stamped, addressed envelope when writing to this Department. Address Housewife's Corner, LIFE AND HEALTH, Takoma Park, Washington 12, D.C.



• **April Magic.** These are the days of April magic, when one feels that almost anything might happen, perhaps something new and exciting, like seeing a passenger pigeon! For the second time last winter I enjoyed reading *Tales You Won't Believe*, by Gene Stratton Porter; and now I think I might find a lark's nest, a fringed gentian, an unusual moth, or a passenger pigeon. We can all enjoy more of the beauty of the wild things, as did this writer. I even believe, these April days, that I can lose a few pounds, and I feel like hippety-hopping when Patsy wants me to.

At least for us there's the magic of our little brook in the glen at the back of our property. It's a secluded little glen; and the water falls into little pools, and cascades and flows over smooth slate. We watch eagerly for the first buds and blossoms on the treasured patches of arbutus. Is there anything sweeter than burying your nose in the coolness and woody fragrance of arbutus? This is where we take our Sabbath walks. John is building a log cabin in the woods overlooking the glen, and we all look forward to camping some night in our own little woods by our own little brook.

We view with pride our few jars of maple syrup made by boiling down the sap from the two big sugar maples in front of the house. It was a steamy process, and the big kitchen range was kept hustling to boil down all that sap.

I dreaded that kitchen range, but our kitchen would have been cold last winter without it, and even yet a fire feels good. This range just ate up sticks of wood, and made the room so homey and cozy. A gas range, in its gleaming whiteness, is a wonderful help, but it doesn't add that warmth and coziness that a wood range gives a kitchen.

• **Curtains.** I presume nearly every housewife is thinking about curtains these spring days, and what she can do about a certain room to improve its appearance. Well, curtains have much to do with this problem, for rightly chosen, curtains can make a small room spacious, and improve a room that is poorly proportioned. The first rule, say the home economic experts, is to keep the treatment of the window very simple, letting draperies hang straight

rather than looping them back. The color of your curtains should harmonize with the color of the walls. Great contrasts in color between the color of your draperies and of your walls will make your room seem smaller. The fewer colors used will add to the spaciousness of the room. Big-patterned fabrics are not for little rooms.

• **House Cleaning.** House cleaning is the rule in April and May, and it presents its safety problems. We are tempted at the close of a busy day to leave things in the stairway to be carried up later. Someone may trip over these objects and be seriously hurt. Take time to anchor your scatter rugs, or don't use them. Strips of thin rubber netting at least three inches wide may be fastened on the edges. Some people paint skidproof material on the back of a rug.

• **Baking Soda.** Keep a box of baking soda in the kitchen. Its uses are many. If your glassware has accumulated a cloudy film, wash it in baking-soda water—three tablespoons of soda to each quart of warm water. For glassware that is cut deep apply a thin paste of baking soda with a small, soft, clean brush, to get into the crevices. Then rinse well and dry. Baking soda is not abrasive, and does not scratch. For removing a rim from a bottle, fill it nearly full of baking-soda solution, the same proportions as given before. Shake bottle forcefully. However, the bottle may need to soak. Rinse well and dry. Baking-soda solution can be used in removing those milky deposits from baby bottles and nipples.

Have you ever cleaned silver the baking-soda way? This method is not recommended for silverware with a butler finish, or that has oxidized decorations. Fill a large aluminum kettle with water. For each quart of water use one teaspoon of baking soda. Bring this soda water to a boil. Then remove the kettle from the heat, and put the silverware in the kettle. Do not boil after you immerse the silverware. In a few minutes the tarnish will disappear. Then rinse your silver and dry well. It is good to rub it with a soft cloth. If you do not have a large aluminum kettle, you can use a small enamel pan in which you put a bit of aluminum, perhaps a small lid. Each piece of silver must have contact with the aluminum or must be touching

another piece of silver that does have contact.

Baking soda is excellent for removing odors that may cling to a pan or a jar long used for storage. Soak utensil in a baking-soda solution (three tablespoons to each quart of water), then wash in hot soapy water, rinse, and dry. You may also use a baking-soda solution when cleaning the refrigerator.

Those ugly stains that come on vases can be removed by rubbing them gently with a cloth moistened and dipped in soda. Rinse and wipe dry.

Have a jar of baking soda near the stove to extinguish small fires that may result from the spattering of grease.

Soda can be used as a dentifrice. Just put some soda in your hand, dip moistened brush in soda, and brush the teeth. A baking-soda solution can also be used as a gargle or mouthwash, and also to keep toothbrushes sweet. It can be used in keeping your brush and combs clean.

Use soda in washing those hard-to-clean baking dishes. Use it periodically also for cleaning bread boxes and cookie jars.

• **Quick-frozen Orange Juice.** Have you tried the new quick-frozen Birds Eye orange juice? This is so highly concentrated that a six-ounce can, plus eighteen ounces of cold water, gives a pint and a half of full-strength juice that cannot be distinguished from fresh-squeezed juice. It is economical, too, compared with the price of fresh oranges. Just add the water to the frozen orange-juice concentrate, stir vigorously with a spoon, or shake it up in a shaker. No guesswork about how much juice the oranges you have will make to supply the family's breakfast. And no disappointment over pithy, dry oranges that fail to yield their quota of juice.

• **Raincoats.** I like the new rainwear; black is no more the only color for raincoats. Raincoats today are smart looking as well as functional, and something everyone should have. A variety of yarns are used in making rainwear fabrics—nylon, cotton, silk, wool, and a combination of yarns or fibers. Of course, all rainwear has to be treated with a finish that is water repellent. Then there are the transparent plastic coats that you can put in your purse, and have handy just in case an April shower comes up when you least expect it.

Epilepsy—the "Mystery Illness" Yields to Science

(Continued from page 9)

found that 74 per cent of his grand mal patients, 59 per cent of those suffering from petit mal, and 85 per cent of the victims of psychic seizures experienced a definite decrease in the number of seizures after taking dilantin sodium. The improvement noted was far greater than that obtained with phenobarbital or any other drug previously used. Epilepsy experts have expressed particular gratification over the success which has followed the use of dilantin sodium in the treatment of grand mal cases, which, besides bringing the greatest amount of unemployability to the victim, and embarrassment and general unhappiness to both him and his family, have been unusually resistant to other drugs.

A much newer medicine is tridione. Indications are that it is not likely to replace or even seriously challenge dilantin sodium as first choice in the treatment of grand mal epilepsy, as this form of the disease has been little benefited by it. How-

He who has health has hope, and he
who has hope has everything.—Arabian
Proverb.

ever, it appears to be definitely superior to all other products in the treatment of petit mal and psychic seizures. Writing in the *Journal of the American Medical Association*, Dr. Lennox tells of the use of tridione in the treatment of forty epilepsy victims. Eleven (28 per cent) were entirely relieved of their seizures; twenty-one (52 per cent) experienced decreases of at least three fourths in the number of attacks suffered; and the other eight were definitely benefited. Tridione, the Harvard specialist wrote, "has been the most dramatic in its effect of any form of therapy attempted." Even more recently the *Journal* published a report of studies conducted by Russell N. De Jong, of the department of neurology of the University of Michigan Medical School. He wrote: "The use of tridione . . . in conjunction with other anticonvulsants such as phenobarbital, bromides, and diphenylhydantoin sodium (dilantin sodium) has almost completely controlled the psychomotor seizures in a large percentage of the cases and has resulted in a decided psychologic improvement."

The product known as hydantal also appears to offer bright hope to epilepsy victims when used in combination with other medicines. In a preliminary report published in the *Journal of Nervous and Mental Diseases*, Dr. Anthony E. Loscalzo revealed that twelve of seventeen grand mal, petit mal, and psychic seizure patients "showed a marked reduction in frequency of attacks." Nine of these twelve had previ-

(Turn to page 25)



His Son's Loving Tribute

THE other night I was in a group of friends assembled to honor and felicitate Stoneborne and his wife on their fiftieth wedding anniversary. It was one of those delightful, warmly human occasions not likely to be soon forgotten by those of us privileged to attend. Different ones told feelingly and affectionately of their past associations and experiences with the Stonebornes, and there was the usual good fellowship and humor rightly characteristic of such gatherings.

The star event, however, came when Stoneborne himself spoke on the question of how to be happily married for fifty years. No, he could not say that he and his companion had never had a cross word; he doubted whether any couple could say that. There were times when, after the toil and anxiety of the day, he came home worn, tired, a bit on edge. Sadly he confessed that under such conditions he more than once "flew off the handle." Then it was that his understanding wife, who knew him better than he knew himself, carried the day with her patience and tolerance. And when he came to himself, as did the prodigal, he told her he was sorry, and that he loved her in the same old courtship way; he threw his arms around her, hugged and kissed her. Mrs. Stoneborne responded in kind, and peace and harmony were restored. "That," Stoneborne assured us, "is how we made it for fifty years, living by love's simple rule of give and take."

Did I say that Stoneborne's simple speech was the star event of the celebration? There was another that ran it a very close second—the tribute offered to his father and mother by Stoneborne's son, Walter. Walter is a successful industrialist in one of our big cities. He employs many men and women in the production and sale of his goods, a man highly regarded for his scientific and mechanical attainments. He it was who, in his filial devotion, planned that celebration despite modest parental protest. "No son," said he when called upon by the master of ceremonies, "ever had better parents than my dad and mother, and I've come a long way across the country to witness to that fact." The fondness in his tone, and the earnest gleam in his eyes as he looked toward Stoneborne and his wife left in all our minds no doubt as to his deep sincerity.

J. Edgar Hoover, of the FBI, is repeatedly emphasizing—and he is being amply supported by those who ought to know, the judges in our courts—that the

underlying cause of our social breakdown is the breakdown of the home. As the home goes, so goes society, the state; for the home is the basic unit of our corporate life. Our social salvation must depend upon our having homes like Stoneborne's, families operating on the conquering principle of a mutual love that can give and take, a devotion that can stand the stress and strain of common human weakness, and a faithfulness of the husband to the wife and the wife to the husband that can hold both together when the tugs of domestic differences and disappointments tend to rend them apart. We would not, then, have the many divorces that are disgracing our civilization, the thousands of soul-damaged children as the unfortunate victims of parted fathers and mothers. A multitude of sons and daughters would rise, like Walter, to call father and mother blessed.

Such children would make any country great and strong, because such homes make great and strong characters.

But I must not overlook the vitally essential reason why Stoneborne's home is the kind of home it is. It is a religious family, one in which the Bible has ever been treasured and read, one in which the family altar is daily erected in supplication to God for daily guidance and protection, in thanksgiving for His mercies to the children of men.

Were we not taught in school that a like cause always produces a like effect?

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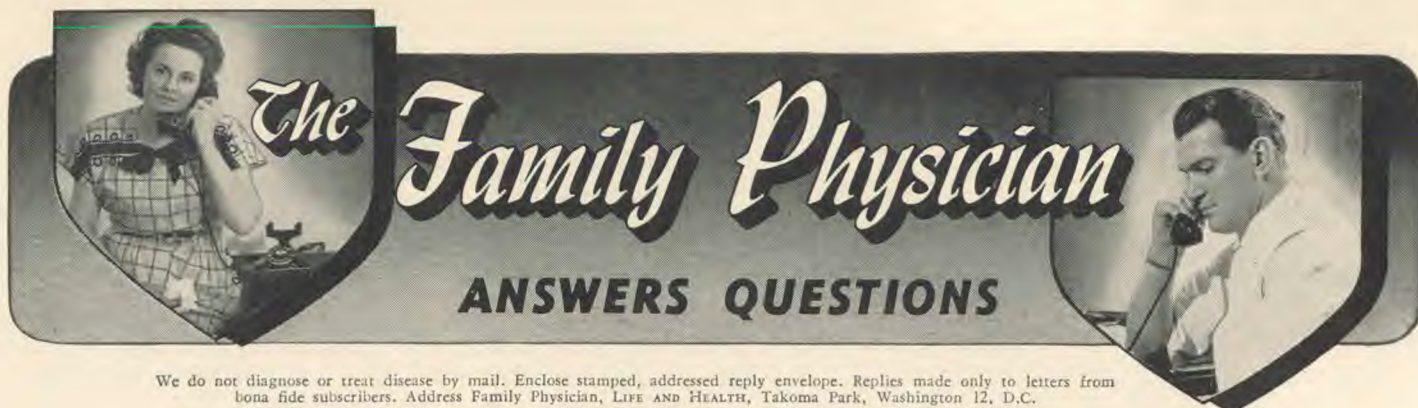
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Acne

My daughter, aged 20, has a very severe skin affliction called acne. This condition came on about four years ago. It seems there is an infection at the root of nearly every hair cell on her face and back. Very often they fester and form "cat boils." She is very nervous and is overweight. Can you suggest anything that will heal the "cat boils" and help to prevent any more from coming?

The problem of acne is one that has caused many persons considerable worry. If it is persistent and develops as it does in the case of your daughter, often permanent scars are left on the skin.

Just why one person should be afflicted so much with the ailment, and others apparently pass by the adolescent period of life without much difficulty, is hard to answer. It seems that the activity of internal glands may have a part to play in bringing about the general condition.

Utmost cleanliness of the skin, with the use of mild disinfectants, and the emptying of any boils that form are important procedures in treatment. A diet not too rich in sweets and carbohydrates is advised, and also the amount of fat should be rather closely scrutinized. Acne is much more active during the growing period of life when there is a hyperactivity of the glands secreting the waxy material formed on the skin.

Mucous Colitis

Please send me what you have regarding mucous colitis.

Mucous colitis is a form of bowel irritability in which an overproduction of mucus from the lining membrane of the colon occurs. There are two general types of colitis, mucous colitis and spastic colitis.

In mucous colitis the irritation is chiefly in the distal portion of the colon, where mucous cells are abundant. Large amounts of mucus may be secreted, and often there will be impulses to move the bowels when only mucous material is passed.

The cause is not known. Possibly the selection of food has some effect on the activity of the bowel. Coarse, rough food should be avoided. It is wise to choose a diet that is smooth and nonirritating in texture. Fruits and vegetables generally should be cooked and pureed, at least for a

time, until the condition begins to respond to treatment. Certain combinations of intestinal powders may be used to good advantage. These should be advised by your local physician.

Amino Acids and Meat Eating

I am seventy-four years old, and have just had a physical examination. The doctor tells me I am starved for the amino acids, which, he says, can only be found in eating lean beef. I wish to know all about the amino acids, and can I get them without eating beef? This doctor claims the rheumatic pains I have are hunger pains. I have diabetes, which I have controlled by diet for five years.

Amino acids are the fundamental substances of which proteins are composed. They are found, it is true, in meats, but they are also found in all natural foods in varying groupings and proportions. In our experience we have not deemed it necessary to use meat to maintain good nutrition. In fact, time and again we have compared blood counts between groups of meat users and groups of vegetarians, and have found vegetarians in the lead. Also they equal the others in such matters as weight. Milk will give you most of the essential amino acids; so that in milk, or cottage cheese, or similar cheese preparations you can find your needs largely covered. Eggs, grains, and legumes contribute in generous amounts to the protein portion of the diet and complement the proteins of milk.

You mention that you have diabetes. It is quite likely that the rheumaticlike pains you experience are the result of a form of nerve change that is seen in diabetes which is very persistent and which surrenders slowly to treatment. In fact, it does not disappear by any form of treatment unless the sugar content of the blood and tissues is kept down near normal for a considerable period of time. Even then, if the changes have begun, it is very uncertain how completely they can be irradiated and the nerves brought back to normal. Possibly an X-ray study would reveal whether there is any acute condition in the right upper abdomen where you have acute symptoms.

~~~~~  
A grouch a day will keep every-body away.

## Diet in Diabetes

*I developed diabetes about one and a half years ago, and was advised by my physician to refrain from eating sugar, potatoes, or bread. I am a farmer and am at a loss to know how to diet in order to keep going. I eat a lot of vegetables, dried or canned fruits, fresh fruits when I can get them, unsweetened grapefruit juice, butter, eggs, and fresh, sweet milk. I drink no tea or coffee, nor do I use tobacco.*

If you continue to be thirsty, it is suggestive evidence that the sugar in your body is not adequately controlled, that either you must reduce the amount of sugar or starch taken in the diet, which may not be advisable, or you should use some insulin. Rather than make the diet restrictive, you would be benefited by using a suitable dose of insulin. We enclose a suggestive dietary outline from which foods might be chosen in selecting a diabetic diet. However, no list of foods can be published that will apply to all individual cases. It would be much better for you to obtain a small book, or guide, on the subject of diabetes, and study it carefully; then from the food tables given there and model diets, endeavor to build up the type of diet that will fit your case best. Several excellent works of this kind are available, and can be used along with the counsel of your family physician.

## Inducing Sleep

*Quite often I lie awake for two or three hours after I go to bed, wondering how I can go to sleep. Then in the morning I am very sleepy. Can you help me on this point?*

We would suggest that before retiring in the evening you take a walk in the open air. The walk need not be long or severe, but such exercise will do much toward inducing sleep.

Do not sleep late in the morning. When evening comes try to finish your work early, and then forget about it and other personal matters, so that you can relax as completely as possible when ready to retire.

Do not resort to the use of sedatives. Sometimes a neutral bath, one at body temperature, for five or ten minutes just before retiring, drying by mopping the water off rather than by rubbing the body, is an aid in inducing sleep.



## Epilepsy—the "Mystery Illness" Yields to Science

(Continued from page 23)

ously taken dilantin sodium and phenobarbital without success. Dr. Loscalzo characterized their response to a combination of hydantal and phenobarbital as "highly encouraging," and even "close to dramatic" in some instances. These enthusiastic expressions would appear to be entirely justified by the statistical results. Attacks experienced by the group as a whole numbered only 191, or just 40 per cent as many as were regarded probable without that form of therapy. Since preparing this report Dr. Loscalzo has continued his studies, and, in reply to a letter of inquiry, has this to say, "Although all the figures have not been tabulated, I believe it is safe to say that the good results are continuing."

Still another powerful anticonvulsant drug has received the formidable technical name of methylphenylethylhydantoin, which will be known commercially as mesantoin. Naturally, it has not yet been subjected to anything like the extensive tests that have been given the earlier preparations, but its showing thus far has been excellent. Dr. Harry L. Kozol treated thirty of his epilepsy patients with it, and six of them received benefits far exceeding those received from any other drugs.

When a man loses his health, he begins to take care of it.—Josh Billings.

It goes without saying that all these products are extremely powerful, and potentially dangerous in the hands of anyone except a physician. Which one, or which combination, should be used in a given case must be determined by careful study of the peculiar needs of that particular case, and often by the patient's reaction to exploratory dosages. The reporting in the *Journal of the American Medical Association* of two deaths from taking tridione, presumably without medical advice, inspired the following editorial comment in that publication: "Until more frequent serious toxic effects are encountered with tridione, its continued use with due regard to such occurrences is considered to be a comparatively safe adjunct in the treatment of epilepsy, but these reports once again demonstrate the need for constant observation of patients."

As remarkable as has been the progress made in recent years in the conquest of epilepsy, complete victory over this ancient and cruel disease is still, unfortunately, not in sight. Whether we must wait a long or a short time for it depends, to a great extent, upon how soon the American people, usually so generous in their support of good causes, discard their stubborn niggardliness about paying for research in this important field. The gains already made become all the more remarkable when we consider that only a pitifully small sum—estimated at somewhere be-

tween \$25,000 and \$50,000 a year—is being spent to unearth the secrets of a major disease that stands second almost to none in the heartbreak it causes.

Testifying before the House Subcommittee on Aid for the Physically Handicapped, Dr. Lennox stated that, as far as he knew, not a dollar of Federal funds was being spent for epilepsy research. As for the individual States, he said that they "spend something like \$20,000,000 annually in keeping patients alive in State institutions but nothing, or practically nothing, for learning how to prevent these patients from becoming lifetime public charges." If it were possible to spend for epilepsy research only one quarter of a cent for each dollar which the nation's epileptics cost the patients themselves and the public, the witness estimated, this insignificantly small outlay "would without any doubt greatly reduce the money cost of this disease, to say nothing of the reduction in unhappiness."

The Harvard specialist emphasized that he had no quarrel with those fighting poliomyelitis, but told the subcommittee that, whereas \$3,000,000 a year was provided for infantile paralysis research (an average of about \$45 for every poliomyelitis victim under twenty years of age), current expenditures for epilepsy research averaged only about twenty cents a year for each patient under twenty. Had he cared to go into expenditures for research in other health fields—tuberculosis, the common cold, cancer, the tropical diseases, and typhus, to name only a few—he would have had no trouble in showing how much better they were faring at the hands of the American taxpayers and philanthropists than epilepsy is.

Unfortunately, that is as true now as it was when Dr. Lennox made his plea to that Congressional group. For although Congress and State legislatures have appropriated huge sums for many purposes since then, their avowed sympathy for present and future epileptics has not expressed itself in the voting of funds needed to pay for vital epilepsy research.

But the future of such research now looks somewhat brighter. Federal and State governments are beginning to face the epilepsy problem realistically, and the philanthropic agencies are also beginning to take notice, and wonder whether they are not passing up an excellent opportunity to serve humanity in a greater way. The need to do something for those 750,000 present victims, and to prevent millions of war veterans and others from swelling their number in the decades just ahead, is at last making an impression upon the consciousness and conscience of society generally. As more and more epileptics win their individual battles against the disease with the aid of the newer medicines now being placed at the service of medical science, and return to useful places in their communities, there will be a growing demand that epilepsy research be given its rightful place.



By Ruth M. White, R.N., B.S.N.E



### Across

1. Profuse bleeding
10. Accumulation of fluid in tissues
11. Pain
12. Organ producing motion
13. Suffix
14. A pigment in paints
15. A ruler of Tunis
16. The largest gland in body
22. Abbrev. for father
24. A specialist in diseases of the eye
26. Two vowels
27. Ancient Babylonian god
28. Secretory organs
29. Zero—zero
30. Abbrev. for street
31. A word the overweight person does not know
32. A prefix meaning correction

### Down

1. Red pigment in red blood cells
2. Abbrev. for education
3. A net
4. The 15th, 13th, 3rd, and 18th letters of alphabet
5. An abnormal lung sound
6. An exclamation of laughter
7. Sour to taste
8. Semifluid butter used in India
9. Weird
17. Solid water
18. Abbrev. for vulgar
19. Spanish article
20. Rigidity of tissues of body
21. First three letters of the boot country
22. Temporary fashions (pl.)
23. A need of the body to refresh one
25. A narrow aperture

(Turn to page 34 for solution)

### ARE YOU MOVING?

You should notify us in advance of any change of address, as the post office will not forward your papers to you even though you leave a forwarding address. Your compliance in this matter will save delay and expense.



# The Mother's Counselor

Conducted by BELLE WOOD COMSTOCK, M.D.



Questions for this department should be addressed to the Mother's Counselor, LIFE AND HEALTH, Takoma Park, Washington 12, D.C. Always enclose stamped, addressed reply envelope.

## Bashful and Stubborn Child

*I am writing in regard to my six-year-old son. It is his first year in school, but he is not doing as well as his teacher would like him to do. He is very bashful and somewhat stubborn. He learns quickly, and remembers well. I would appreciate any advice you could give me in helping him to overcome his bashfulness and stubbornness. If he doesn't overcome them, I am afraid he will not pass to the next grade. What kind of punishment would you suggest? Or do you think he will change as the term goes on?*

No doubt your little boy's stubbornness is a part of his shyness, and as little attention as possible should be paid to both these traits. Be careful not to make an issue of anything with him. Make your requests pleasantly, and in such a way as not to arouse any stubborn reaction. It is well for grownups to imagine themselves in the child's place and be quite as careful in an attitude of courtesy toward him as they would be to an older person. Take particular pains to commend him, and avoid arousing antagonism on his part. A child's stubbornness is often a reaction to the way in which certain requests are made. Avoid criticizing him. Trying to reason with the child in regard to his behavior only makes him worse. I believe that, with the right attitude on the part of yourself and others dealing with him, the situation will tend to correct any personality defects he may have.

## Child Cries When Mother Leaves

*I have a small daughter who is nineteen months old. She is our only child, and depends on me for everything. In fact, she is a "mother's baby." She is a normal, well-adjusted child, and her home environment is as it should be. My problem is this. Every time I leave the room she cries. She will not even go outside to play with the children next door for fear I will leave her. It is getting to the point where my nerves are getting on edge because of it. I have tried everything I know to help her. I have told her I am leaving but will be back in a few minutes. I have left her when she is busy and does not see me go. I have even tried to shame her and bribe her, and when these failed I tried spanking her, but to no avail. All these ways have been suggestions from well-meaning friends, but*

*nothing has helped. Now I am turning to you in the hope that you have some solution.*

It seems to me that your problem is one that any mother might have, especially with an only child. I do not believe it need be considered a serious problem. It is very natural for a child to want to be with her mother constantly and to act as your little girl does. However, the thing to do I believe is not to take the matter seriously. When you must leave your little girl with some other person, simply tell her you are going and will be back at such and such a time. Do not plead with her or particularly try to soothe her. Just leave quickly saying good-by in a cheery manner. Soon your little girl will find that her protests avail nothing, and they will tend to be less. She will gradually come to understand more fully that these absences are only for short periods, and will learn to be content. It is possible that, in your effort to

soothe her, you plead with her and show anxiety because of her attitude. This makes leave-taking a time of argument, remonstrance, and pleading. Perhaps if it were all done in a more businesslike way, the strain would be less. At any rate, when you must leave her, it cannot be helped, and as time goes on she will tend to accept such separation with better understanding and cooperation. I am sure it is not a matter you need to worry about.

## Fever Blisters

*I am writing you in regard to my thirteen-year-old daughter. She has had trouble with fever blisters from the time she was born. This may seem a small thing to be worried about, but I have tried everything I can think of and everything others have told me about, but nothing seems to help. I have had her to two or three doctors, and they have suggested camphor or some other ointment, but I believe the trouble is inside. The fever sores just appear at intervals. She is free from them for a while; but if she gets cross and irritable, her face gets red, she loses her appetite, and the fever blisters appear. She seems perfectly healthy in every other way except this. My daughter's diet consists of fruits, vegetables, and milk. She is a very hearty eater. I do hope you can help me in this matter.*

From what you tell me about your daughter I believe there is a nervous background for the fever blisters. There probably is a cyclic element in it. It might come under the heading of allergy. She perhaps is a nervous child; and, as her nervous tension increases, there comes a crisis, at which time she has the symptoms of irritability, flushed face, and poor appetite. Perhaps the fact that she is about to the age of puberty tends to aggravate the case now. When these attacks occur, she should not be urged to eat but she should be treated sympathetically without anxiety. Her surroundings, of course, should continually be cheerful and serene, and all home atmosphere should be one of happiness. It is possible that vitamin B complex taken with each meal would help her nervous system. I sometimes advise giving such a child one panteric capsule with each meal. Your druggist can advise you as to the kind you should buy. The pancreas has a relaxing effect on the sympathetic nervous system.



## God's Gift

By ESTHER NILLSON

I have penned poetry, and  
too, my hands,  
Have brought music from  
the ivory keys,  
I have adored the rising of  
the golden sun  
And thrilled to heaven with  
love's ecstasies,  
But all events in my crowded  
life  
Fade into nothingness be-  
side her here,  
This little life fresh from the  
hand of God  
So wanted and so infinitely  
dear.



# Clippings

From THE MEDICAL PRESS

## Measles!

MEASLES is not to be considered lightly. It often leads to serious complications, especially among preschool children.

Your doctor can modify and, if advisable, prevent measles by a simple injection of a serum called gamma globulin.

Prevention of measles is recommended only for the very young or the sickly child.

To prevent measles, your doctor gives gamma globulin immediately—within twenty-four hours—after exposure.

In most cases it is better to modify than to prevent measles.

To modify measles, your doctor gives gamma globulin on the FIFTH OR SIXTH day after exposure.

Modified measles is relatively mild; almost never accompanied by complications; and is usually followed by life-long immunity.—Michigan Public Health.

## Cigarette Advertising

AMONG other comments about tobacco and cigarette advertising a recent editorial in *The Journal of the American Medical Association* states:

"Readers must remember that the cigarette business is a tremendous business and one that increased continuously in volume for many years. The consumption of cigarettes has increased from approximately ten billion cigarettes annually around 1910 to approximately three hundred and fifty billion annually since 1946. The rise in consumption of cigarettes has paralleled the development of new technics in advertising, utilizing the press, periodicals, the radio, motion pictures, television, sky writers, billboards, direct by mail, sampling, exhibits, and every other technic.

"No doubt the manufacturers are aware of the trend in the promotion of alcoholic liquors and their abuse which finally led to the enactment of prohibition legislation. This may well be the path now being followed by the cigarette industry and one which will eventually lead to restrictive legislation unless voluntary restrictive policing is undertaken by the industry.

"Gradually, however, claims point more and more toward the single factor of the extent to which certain cigarettes irritate the throat. One product is said to be less irritating than others, and the suggestion is made that persons who suffer irritation from other cigarettes try the one that is said to be less irritating. Another is said

to be always milder; a third is said to be absolutely free from throat irritation as based on tests conducted under the supervision of physicians.

"The publications of the American Medical Association have received a few protests from physicians relative to the advertising of cigarettes: The total number of letters would not exceed a dozen annually. Some protests have been stimulated by the competition in the cigarette industry since the users of glycerin are at war with the users of diethyleneglycol; since the purchasers of tobacco with less nicotine compete with those using tobacco with more nicotine, and since the manufacturers of devices that eliminate tar oppose the smoking of cigarettes without elimination of tar. Probably there is no other merchandise marketed in the United States in which the competition is fiercer or greater.

"Now that the advertising has begun to concentrate on the factor of throat irritation, more attention will have to be given to the methods by which irritation of the throat can be measured. Pathologically, one considers the clinical signs and symptoms such as redness, congestion, swelling, exudation, pain, sensitivity, and similar subjective symptoms and objective signs. Obviously, more refined technics for study are in order.

"Studies have been made of the throat utilizing color photography; yet none of the technics by which throat irritation is measured is standardized. Furthermore, we know that the throat is easily irritated by various bacteria and viruses, as well as by chemicals and physical agents. It would be a wise physician indeed who could differentiate between the irritation caused by the smoking of cigarettes and that caused by various bacteria, chemicals, or heat. Manufacturers and the advertising agencies that develop this advertising are approaching a point in which the advertising is no longer significant. And yet one can remember when it used to be worse than it is now.

"The Federal Trade Commission has been striving to hold this advertising within reasonable limits. Hearings have been held for a number of years and as yet a decision has not been forthcoming from the Federal Trade Commission as to claims that are justified by the evidence and those that are not. Further truly scientific studies and respect for intelligent advertising may obviate the need for further extensive and time-consuming trials."

## Appendicitis

MEDICAL authorities estimate that deaths from appendicitis could be greatly reduced by observance of a three-point rule. In case of a stomachache, which may be appendicitis, play safe and—

Remain quiet,

Refrain from taking a laxative, food, or medicine.

Call a doctor, if pain is persistent.

Ordinary stomachaches, as a rule, do not last longer than one to two hours. The only person trained to determine whether or not your stomachache is appendicitis is a physician. Consult your doctor when stomach pains persist.

Numerous deaths from appendicitis are laid to self-treatment. Many more could be avoided if a doctor were called in time to provide proper diagnosis and treatment.

—Georgia's Health.

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# Just for Younger Boys and Girls

LIFE and HEALTH LEAGUE

Be a HABITEER,  
CONQUEROR,  
and  
LEAGUER

VEDA SUE MARSH, R.N.



## I'VE GOT THE MEASLES!

THE Little Jays were all snugly tucked into bed. Mother and Daddy were downstairs. Mother was busily mending, while Daddy read to her.

"Do you hear that, Daddy?" said Mother Munroe.

"What are you hearing now?" asked Daddy.

"The twins. Hear that dry, hacking cough? Twelve days ago Judy came down with measles; and I have been afraid we would have a siege of them also, for measles is so very contagious, and Judy was with the twins before she broke out with a rash. It takes twelve to fourteen days from the time one is exposed until the first symptoms appear. I do not like the sound of that cough. Get a flashlight, and come upstairs with me. I want to look into their throats."

The twins roused up as mother and father entered the room, for they were not quite asleep.

"Mother wants to look in your mouth, Joan. Open wide while Daddy holds the flashlight."

The throat was a little red, but Mother looked inside each cheek for some little white spots, called Koplik's spots. They usually appear in measles even before the rash appears. She then took their temperatures.

As they went downstairs again, Mother sighed as she realized the siege she had ahead, for those Koplik's spots told her all too plainly that the twins were coming down with the measles.

"I'll call Dr. West right away," said Mother. When she returned from telephoning she began to plan her campaign.

"Dr. West said he would stop by on his way to the office in the morning. He will also notify the Health Department so that the measles card can be put on the house. I am glad the doctors know how measles is transmitted and carried now, so you can stay at home, and still continue with your work at the office. Placarding the house warns people who have not had measles, so they will stay away, but it al-

lows the members of the family who have had measles to go about their usual work.

"The nurses from the Health Department are so helpful to tell us just what to do and how to disinfect daily and at the end of the illness. I'll talk to them tomorrow.

"I put a kettle of water to boil on an electric plate in the twins' room. The moisture will help to stop their cough. I will try to keep them warm so that they will not take cold. I am so glad they are in such good health. They should not be very sick with measles if I can keep them from taking cold. I'll let their teacher know about them tomorrow. I do hope no other children have been exposed."

A few days later when Daddy came home he heard peals of laughter from the "measles room" upstairs. Peeking in the door, he found the twins having such a good time that he almost wished he could be at home with the measles also.

"Read us a story, Daddy," they called. As he found a book he thought they might enjoy, he noticed what they were doing.

Mother had spread a sheet over each bed. They were feeling so good they were allowed to sit up in bed. With bed jackets on and the room nice and warm, they were working away with paring knives.

"Daddy, can you tell what this is?" asked John.

Daddy screwed up his face as if it were very hard to decide.

"It is a chow dog," said John.

"See my kitty," said Joan.

"So I have some sculptors in the family, do I?" asked Daddy.

Mother had given each of them half a large cake of Ivory soap, and they were carving with paring knives.

When one has the measles, the eyes are weak, and one must not read or have a bright light. So Mother gave them the soap to carve. She also helped them choose games they could play in bed. Hide-and-seek was a favorite.

John would say, "All right, I am hidden; try to guess where I am."

"Are you in the barn?"

"No."

"Are you in the house?"

"Yes."

"In the kitchen?"

"No."

"In the bedroom?"

"Yes."

Playing this kind of hide-and-seek, they could pretend they were hiding in small things, like the clock or a vase.

In a similar way they guessed flowers and birds the other one had chosen.

Though they missed reading from books, they had their phonograph, and enjoyed playing their favorite records; and they especially enjoyed storytelling time, for now Mother and Daddy spent all the time they could with them. It was not so bad, after all, to have the measles.

### Suggestions to Teachers

1. Get a copy of the regulations for contagious diseases from the Public Health Department, and, in the social science class, have the children bring in reports of the State regulations for each one.
  2. Note the incubation period, the duration, and the important symptoms for each common disease.
  3. List the diseases that each child has had.
  4. Discuss the importance of observing quarantine.
  5. Have a Public Health nurse talk about types of placarding for various diseases.
- Plan an immunization program during the month with the Public Health Department.

## Junior Life & Health League

### Rules

1. I take two baths each week.
2. I brush my teeth twice daily.
3. I drink milk every day. (Preferably 1 qt. daily.)
4. I wash my hands before eating.
5. I eat daily: vegetables, fruits (fresh, canned, or dried), whole-wheat or enriched bread.
6. I play or work out of doors six days a week when weather permits.
7. I sleep 8 to 10 hours every night.
8. I try to be courteous and cheerful at all times, and do one good deed for someone each day.

### Progressive Class Requirements

HABITEER: Observe the rules for two weeks, and continue to keep them.

CONQUEROR: Be a Habiteer for six months, and continue to observe the rules.

LEAGUER: Be a Conqueror for six months, and continue to observe the rules. Enlist one new member in the League. Send in one new subscription to LIFE AND HEALTH.

The Habiteer, the Conqueror, and the Leaguer receive membership cards, and in addition the Leaguer receives a button.

### Pledge

I have read the rules of the Junior Life and Health League, and have been observing them for (two weeks \_\_\_\_), (six months \_\_\_\_), (one year \_\_\_\_). I shall continue to observe them, and will read the Boys and Girls' page each month. Please enroll me as a (Habiteer \_\_\_\_), (Conqueror \_\_\_\_), (Leaguer \_\_\_\_) of the Junior Life and Health League.

Name \_\_\_\_\_

Address \_\_\_\_\_

Age \_\_\_\_\_ Grade \_\_\_\_\_

### Directions

Copy the above pledge in your own handwriting, sign your name (very plainly), and give your age, and grade if in school. Then write your address and the name of your father or mother. Mail this to Aunt Sue, LIFE AND HEALTH, Takoma Park, Washington 12, D.C.





# Wings of Health

MADGE HAINES MORRILL, M.A.

A CLUB FOR OLDER  
BOYS AND GIRLS



## SUSIE, THE WORRIER

**B**UT, Miss White, I don't want to," Betty said, as she stood by the teacher's desk wiping her eyes.

The first bell had rung for the opening of school, and students were hurrying into the room. Some of the girls saw Betty standing by Miss White's desk. They thought Betty looked as if she were crying, for she kept wiping her eyes with her handkerchief. The girls walked up to Betty to see if they could help her.

Miss White's voice was firm as she spoke to Betty, "But, my dear, you know what the rules of the school are."

"Yes," Betty was almost sobbing, "but I don't want to. The nurse might make me stay out of school today, and this is our club afternoon, and I don't want to miss the surprise Allen is giving our club."

The girls knew then that Miss White had asked Betty to go to the nurse's office for a checkup, and they also knew it might mean that Betty would have to go home. One of the girls said, "Please, Miss White, don't ask her to go right now. Maybe it is just dust in her eyes and nose."

Miss White gave a pleasant laugh. "Well, if that is all that is causing Betty's red eyes and running nose, then the nurse will let her come back to our room very soon, and she won't need to miss the surprise this afternoon. But suppose it isn't dust? Suppose Betty is coming down with measles, or diphtheria, or—"

Almost as if someone had pushed them, the girls edged back away from Betty, and gave her a worried glance.

Betty felt their sympathetic attitude suddenly change. Her better judgment told her what she should do. "I'll go right now," said Betty, and she turned and went down the hallway to the nurse's office.

The girls watched her leave, and then they turned to each other saying, "Smallpox? Oh, my, what shall we do?"

Miss White stepped over to them. "You see, girls, we have certain rules in this school for the purpose of protecting the health and safety of all. One rule is that when a pupil has certain symptoms, he should be sent at once for inspection by the school nurse. When Betty came into the room this morning, I noticed that she kept wiping at her nose and her eyes. This may be only a slight symptom, but it could be a forerunner of some disease. Now is the time to find out."

"Oh," said Susie, "wouldn't it be dreadful if we all came down with smallpox?"

Miss White put her arm affectionately around Susie. "Now, don't get a worry spell on. It is probably only some excess dust—just as you girls suggested when you didn't want me to send Betty to the nurse's office. But it is wise for us always to be on the alert for the possible danger of exposing our whole school to some disease."

Susie smiled and said, "I am glad we have a school nurse and those rules."

The last bell rang, and it was time for school to begin. All the students took their seats. Miss White said that Allen, their club president, had an announcement to make.

Allen stepped forward and said, "This afternoon our club is going on a trip. We are going to visit the Board of Health building downtown. I have asked Dr. Morgan, the director of Public Health in this county, if we could come, and he said he thought it was a good plan for our club to get acquainted with the work of his department."

Alice spoke up, "I hope Betty will be able to go with us."

Allen suggested that there was no need to worry about Betty until the nurse gave a report. "I think it would be well if we all read about the work of the Health Department. There are books and pamphlets in our library, and during our free time this morning we could do some reading."

And that is exactly what the young people did.

Teddy found in his reading that the Health Department was concerned with the water supply of the city, that it is checked carefully to make certain that it is pure for drinking. He found out how the inspection of dairies and the care of animals and the proper handling and bottling of milk were done.

George learned from his reading that the Department of Health was concerned with the proper disposal of sewage, and that officers inspect the sewage systems of the city and of the homes.

Allen found that it is the work of the Health Department to keep records of all births and deaths. These records are called vital statistics. Because of these records other departments can know how many

persons were born in their community and how many died.

Susie found that the Health Department was concerned with the prevention of disease. The health officers check on all reported cases of communicable diseases. If necessary, they place a quarantine sign on the home where there is a communicable disease.

Susie said, "I found that schools are asked to have morning inspections. Any child with symptoms of a communicable disease is to have an examination by a nurse. Then, if the nurse finds the child to be 'coming down' with some disease, that child is sent home, so as not to expose the rest of the students. The sick child is to be quarantined in his home until the disease has left him."

Turning to the girls, Susie said, "My, I hope Betty is all right; we wouldn't want her to have smallpox."

Just then Miss White spoke, "Now, Susie, I'm going to have to call you our worrier if you don't stop talking about smallpox. Now think, Susie, what have you had, and what have all the other students in the school had, that will make them safe from contracting smallpox?"

Susie opened her eyes wide and then laughed. "Oh, I had forgotten. Why, we have all been vaccinated, haven't we? How silly I was to worry. Well, I know Betty doesn't have smallpox."

The door opened just then and Betty walked into the room. She was smiling. The children all waited to hear what the nurse had told Betty. "She took my temperature, and looked into my throat. She gave me a thorough examination," Betty told the children. "Finally she said she was sure it had been the dust blowing in my face on the way to school. She said it would be safe for me to come back to my room."

"Good," said Susie. "Now you can go with us on our trip."

"Where to?" asked Betty.

The club members quickly explained.

Betty spoke up, "We must have a very  
(Turn to page 35)



## How Good Is Honey?

(Continued from page 13)

from clover or orange, and others prefer the characteristic and strong flavor of that from buckwheat.

The color of honey varies too. It may be as clear and light as water, or it may be as dark as molasses, all of which depends upon the flowers from which it comes.

To ensure getting the kind of honey which best suits your taste, do a little investigating and tasting. When you find the flavor you like best, insist on it.

Honey may change its texture and appearance as a result of changes in temperature. Much of the honey of finest flavor has a tendency to granulate when subjected to frequent changes in temperature. This greatly varies with different kinds of honey. Sometimes the entire content becomes white and hard as soft sugar. At times honey may become about the consistency of butter, though white as milk. This honey is not an adulterated product; it simply has begun to "sugar."

People in other parts of the world consider honey butter the finest spread. Americans demand that the beekeeper prevent this natural crystallization from taking place. He now puts it through a heating process, which destroys some of the fine flavor and its life-giving properties.

How little we realize that our demand for white bread, granulated sugar, and everything else in the same lifeless form makes us as unnatural as the food we eat. As a result we have a partial plate, an appendix in a bottle on the mantel, and much too soon a few flowers to mark the place.

## Tired Out?

(Continued from page 14)

frustrations. Any one of these states, over a period of time, can produce exhaustion. This exhaustion may become so great as to cause almost total loss of the usefulness of the individual. There are strains, tensions, conflicts, and frustrations that we all must bear; but the wise person will quickly put each in its own place in his life, and keep it there. I believe the best way to accomplish this is to bring all of them out into the light, and evaluate them honestly.

The principal's voice that annoys you so—perhaps you can find other compensations in that principal's personality that will in time help you to forget the irritating nature of her voice. That teacher you "just can't bear" perhaps has qualities that are amusing, and at which you can smile rather than exhaust your adrenals in invective.

With grief, with anxiety, with conflict, we can help ourselves if we *look in* only long enough for a real evaluation, and then *look out* to discover how fortunate we are, and how much greater than ours

are the problems many others are trying to solve. So often the tensions we carry are not worthy of the energy we expend on them. That smoldering grudge, that hurt, that worry, accomplishes nothing but our exhaustion. What a waste, in a time when every bit of energy is needed for important things!

Last of all, we cannot afford to become morbid about our tiredness. Weariness that we persist in thinking and talking about is less bearable than undiscussed fatigue. Frequent reiteration of our woes tends to establish thought patterns that may persist after the cause has disappeared. This is where good mental hygiene performs a great service. If we can find real joy and satisfaction in our work, even the weariness it causes can be forgotten.



By Alice G. Marsh, M.S.

**Protein Content of Milk.**—Milk and milk products provide about one fourth of the protein in the food supply of the people of the United States. Probably this is the largest single factor that makes us the best-fed people of the world. A single quart of milk supplies thirty-two grams of complete protein—nearly one half of the daily protein requirement for the average adult.

**Vitamin C in Potatoes.**—Keep the jackets on potatoes just as long as possible. This rule will preserve a large part of the vitamin C and some of the thiamin in the potato. Potatoes should be boiled whole in their skins. Even when they are to be mashed, most of the vitamin C is retained if they are peeled after cooking and just before mashing. Less vitamin C is lost during storage in the refrigerator if the cooked potatoes are stored with their jackets on.

**Prenatal Influences.**—Dr. C. Anderson Aldrich, director of the Rochester Child Health Institute and professor of pediatrics at the graduate school of the University of Minnesota says the following regarding the prenatal period of a child's life: "It is becoming more and more evident that important things happen to a baby before he is born. The mental and emotional environment of his home may be set at this time; the food his mother eats has an important bearing on his health; his mother's health or illness may decide his welfare or even determine his life or death; the attitude his mother takes in the prenatal period toward breast feeding may influence not only his nutrition but also his feeling of security in the outside world."

**Successful Reducing.**—"The calories, odors, tastes are too frequently a substitute for affection and human understanding, causing the guests of your tables to wax fat upon their unhappiness." We have always known people to "pine away" due to unhappiness, but it has taken modern psychology to uncover the fact that overweight can be due to the same cause. When an overweight person is unhappy, reducing measures alone are of little value. For successful reducing, nutrition and psychology must join forces with the more or less inert will power of the person who is shortening his lifeline by lengthening his waistline.

**Increased Knowledge of Nutrition Necessary.**—When man or animal is allowed self-selection of food, and nutrition is left entirely to chance, sufficient quantities of all nutrients are not assured. The simple and direct demand for energy food as interpreted through hunger is generously met. There is no mechanism other than chance that will make certain that other nutrients will be selected in adequate amounts. Nature takes care of the matter by giving food nutrients packaged together as "natural wholes," and as long as food is gotten in this form, poor nutrition is much less likely to occur. The more we refine and change whole foods, the more we must know about nutrition, and even then knowledge may not make up for the deficit.

**Need for Complete Proteins.**—A food containing an incomplete protein plus another food containing an incomplete protein may add up on paper to a complete protein—one that maintains life and supports growth. But if they do team up in actual living, they must be fed together. One protein does not efficiently supplement another if their time of absorption and utilization is hours apart. A safe rule in planning dietaries is to include enough complete-protein foods so that one third of the protein is already complete. For the growing or depleted body, two thirds of the protein needs should be in the complete form. A practical example of this is a dish of cereal and milk. The cereal protein alone would not support growth efficiently, but it does augment the value of the complete protein of the milk.

After severe body depletion it is recommended that two to four grams of protein per kilogram (2.2 lbs.) of body weight be given in the daily diet. Normally, one gram of protein per kilogram of body weight will give optimum protein nutrition to adults.

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# Hobbies

By GRACE FIELDS

## RAFFIA BOTTLE COVERS

**I**F YOU'D like to play around with raffia without getting involved in a major project like making a basket, then try covering a bottle. The process is simple, the results rewarding. Required materials: twelve strands of dark and twenty-five strands of light raffia,\* a bottle the size of a cold-drink bottle, glue or paper cement, scissors, a sharp knife, shellac, and a shellac brush.

First separate the strands of raffia, then soak in water, allowing them to drain on a paper or cloth while you work.

Let us warm up by making a braid (Figure 1). Using two strands of raffia for each strand of the braid, four light and two dark, knot them together and hold in place with a thumbtack, unless you can find a good-natured collaborator to hold the knot for you. Once the braid is finished, let it rest, and do things to the bottle.

Cover it with glue, and let it dry. Then glue the tip of a strand of dark raffia (the hard, narrow end), and starting at the base of the bottle, lay it neatly in place, going round and round, using the entire strand. Be careful to cover the end of the strand with the second row as it is being wrapped. Keep the rows closely parallel, but don't let them overlap. Continue the dark color for about one inch.

Use the light raffia in the same way, working up to the middle of the bottle. Change off to dark for about an inch and a half, then back to light until you are within one-half inch of the top. Finish off with dark. At the top of the bottle, glue the dark strand and tuck it neatly under the last rows.

Now you're ready for the braids. Measure lengths for each spot where they are to be placed—the very top, the bottom, and edging for the dark strip in the center. Cut the braid accordingly, and put cement on the measured parts and on the parts of the bottle to be covered (Figure 2). Lay the braid firmly in position and press flat. Cut off any ragged edges.

Figure 3 shows the bottle in its completed beauty. Maybe yours looks even better. All edges should be glued down carefully, and the entire raffia covering shellacked and left to dry overnight. Then give it another coat.

While you were covering your bottle, you doubtless conceived a half dozen bright ideas for variations. Watch for interesting-shaped jars and bottles, and you'll have fun dressing them up in new and different garbs of your own devising with raffia.

\*Get raffia at your hobby and craft supply store or from a mail order company such as American Handicrafts, 45-49 South Harrison Street, East Orange, New Jersey.



Figure 1. Braiding the Raffia for the Final Trim



Figure 2. A Good Coat of Glue Goes on the Bottle Before Putting on the Braid

Figure 3. Who Would Ever Guess It Was Just an Ordinary Pop Bottle?



## Is It Anything Serious, Doctor?

(Continued from page 17)

are present. If the tumor is found to be cancerous, the entire breast and the lymph glands under the arm are removed without delay. If the tumor proves not to be malignant, the wound is closed, and thus the patient is relieved of future worry.

The shape and degree of expansion of the chest are observed. The doctor will also notice whether or not the apices of the lung, the space just above the collar bones, are well filled. He will thump the chest to learn whether the lungs are clear and well expanded, and will listen to the breathing sounds with his stethoscope. Here again, by experience he has become familiar with the normal breath sounds produced as the air enters and leaves the tubes and cells of the lungs. Abnormal breath sounds are interpreted, and conclusions drawn. In obscure conditions affecting the lungs, X-ray of the chest is most useful in diagnosing the condition. This is especially true in diagnosis of early tuberculosis. Although the deaths caused by tuberculosis have been greatly decreased in recent years, this disease is still causing a large number of deaths. Systematic X-ray of the lungs of school children should be carried out. By this means early diagnosis may be made, and by prompt and effective treatment the disease can be cured.

In the examination of the abdomen, the tone of the muscles of the abdominal wall is first noted. If these muscles have lost their normal tone and are relaxed, the circulation of the blood is impaired, because these muscles help to maintain the circulation. Relaxed abdominal muscles also allow prolapse of the abdominal organs. In many cases pain in the back may be due to faulty abdominal muscles, which allow the abdominal organs to sag. The physician will again check for signs of tenderness or tumor masses, and will determine the position and size of the abdominal organs. Where indicated X-ray will be recommended in the diagnosis of more obscure conditions, such as peptic ulcers, gallstones, other diseases of the gallbladder and diseases of the small and large intestines.

In women, especially in the critical years of life, the pelvic organs should be examined. Any abnormal discharge or bleeding should be accounted for. The same holds true with bleeding from the rectum. Statistically cancer is on the increase; and if treatment is to be effective, the disease must be detected early and treatment instituted at once. Other abnormal conditions of the rectal region, although minor in nature, may cause many reflex symptoms, such as nervousness, headache, and constipation. These conditions are hemorrhoids, commonly called piles; prolapse of the lining membrane of the bowel; ulcers; and spastic, or tight, muscles. Many of these can usually be corrected by simple office treatments. (Turn to page 34)



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| Sassafras Tea, try this with cream after meals!                                                           | .15     |
| Soy Milk Powder (use liquefier for milk shakes)                                                           |         |
| lb.                                                                                                       | .35     |
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| Black-Strap Molasses Powder, rich in iron, 8 oz.                                                          | .35     |
| Lecithin Paste, good source of phosphorus, 6 oz.                                                          | .75     |
| Lecithin Capsules, 50 for \$1.00, 100 for                                                                 | 1.90    |
| Soy oil, light or dark, rich in lecithin, pt.                                                             | .75     |
| Vegetable Salt in shaker (8 oz. refill 35c) 7 oz.                                                         | .40     |
| Nut Embryos, rich in protein, amino acids, 1 lb.                                                          | .35     |
| Soy Cracks, like grape-nuts, starch-free, protein food for cereal, loaves, roasts, dressings              | .25     |
| Snitzler, Quick Veg. Shredder (3 for \$13.95)                                                             | 6.95    |
| Soy-Grass Cookies, Wheatless, Sugarless, pkg.                                                             | .35     |
| Peanut-Oil Skin Cream, for beauty's sake, pure                                                            | 1.50    |
| Flex-Seal Pressure Cooker, best, not aluminum                                                             | 15.70   |
| Whiz-Mix Elec. Liquefier, drink your vegetables, make milk shakes, health drinks, 2 for                   | 39.90   |
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## FOODS, FANCIES, AND FACTS

(Continued from page 15)

for differences in actual food intake due to food habits, individual tastes and variations in economic status."

How can one put into simple language the technical information of the human requirements for measurable nutrients, and indicate the zone for those that are carried in a given amount of food? How

can one state the relation of balance between the various nutrients and the relation of nutrients to life and health in general? The questions are not easily answered, because the individual requirements differ for total food; but in general, the following foods provide most or all of the essential protective food materials.

| WHAT                                                                                                                                                                                  | HOW MUCH                                                                                                                                                          | WHY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Potato</b>                                                                                                                                                                         |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| White or sweet potato                                                                                                                                                                 | One half to one                                                                                                                                                   | Energy, supplementary protein, basic minerals, some water-soluble vitamins at a low cost                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Whole Grains</b>                                                                                                                                                                   |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Breakfast foods, breadstuffs, or cereal grains                                                                                                                                        | In all, at least one or two ounces<br>One slice of bread is one ounce.<br>One slice of brown bread is equivalent to about one-half cup cooked whole-grain cereal. | Energy, supplementary protein, minerals, and B complex vitamins at a reasonable cost<br><br>Wheat germ and corn germ contain protein of the grade-A type.<br><br>Stop using refined cereals and starches, and replace these undesirable calories with whole wheat, whole rye, unpearled barley, natural rice, and yellow unbolted corn.                                                                                                                                                   |
| <b>Vegetables</b>                                                                                                                                                                     |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Green leaves                                                                                                                                                                          | One-half cup or more                                                                                                                                              | Supplementary protein, low carbohydrate, source of carotene, choline, and some water-soluble vitamins                                                                                                                                                                                                                                                                                                                                                                                     |
| Other vegetables including a preponderance of yellow ones                                                                                                                             | One-half cup or more                                                                                                                                              | Energy, residue, minerals, and both fat- and water-soluble vitamins                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Salad greens, fresh tomatoes, canned tomatoes, or slightly cooked green vegetables                                                                                                    | One-half cup or more                                                                                                                                              | Source of vitamin C, low carbohydrate, residue, unknown vitamins destroyed by cooking                                                                                                                                                                                                                                                                                                                                                                                                     |
| Seeds or seed meals, as peanuts, cottonseed flour, sunflower seeds, soybeans, and soybean flour; or beans, peas, lentils, and garbanzos; or nuts (especially almonds and Brazil nuts) | 1 ounce equivalent                                                                                                                                                | Source of protein called complementary and highly efficient, associated with fuel, B complex vitamins, and basic minerals, residue                                                                                                                                                                                                                                                                                                                                                        |
| <b>Plant Fats</b>                                                                                                                                                                     |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Olives or avocado; or sesame-seed, olive, peanut, soybean, corn, or vegetable oils                                                                                                    | Will replace animal fats one-half ounce daily                                                                                                                     | Source of fat-soluble activators, essential fat acids, and source of concentrated fuel                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Fruit</b>                                                                                                                                                                          |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Citrus fruit, as orange, grapefruit, or mixture of several similarly good food sources of organic acids and vitamin C                                                                 | Equivalent to one orange a day<br>NOTE.—If this group is unavailable, use more raw foods from the vegetable group and use three tomatoes in place of one orange.  | Basic minerals, water-soluble vitamins, organic acids, low carbohydrate—when served uncooked are potential sources for unidentified vitamins.<br>NOTE.—The whole fruit is more important than the juice, because the tissues contain certain important unidentified protective materials.                                                                                                                                                                                                 |
| Yellow fruits and other fruits<br>This includes fresh and dried seasonal choices.                                                                                                     | One-half cup or more                                                                                                                                              | Peaches, red cherries, and apricots are a source of iron and copper in combination. Malic and citric acid are present in most fruits. Certain fruits with laxative effect, in an above-their-residue content are desirable additions. Basic minerals, except in the case of rhubarb, cranberries, plums, and prunes<br><br>Water-soluble vitamins and some carotene<br><br>Food fruits and flavor fruits contain unidentified food materials if served uncooked, or if properly prepared. |



## Protein-rich Main Dishes Above the Ones Already Listed

|                                                                                                                                                                             |                                                        |                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Milk                                                                                                                                                                        | From two to three cups, or equivalent in plant sources | Protein of high biological efficiency, calcium, lactose, riboflavin, casein as a source of methionine                                                                                  |
| Egg or alternate                                                                                                                                                            |                                                        | Protein, lecithin, water- and fat-soluble vitamins, sulfur-containing amino acids                                                                                                      |
| Cottage cheese or alternate, as other soft cheeses, or luncheon dishes made with a combination of nuts, cheese, soybeans, legumes, cereal germs, eggs, milk, and seed meals | One portion                                            | Some calcium, protein in proportion to the amount of dilution by cream, casein<br>NOTE.—If dairy products are the chief source of protein, use one and one-half cups green vegetables. |

## Dangerous Drugs

(Continued from page 19)

practice in three years. He concluded that "barbital is a danger to the community without restriction of its sale."

For a number of years obesity cures have either been wholly a fraud, that is, having no effect whatsoever, or they have contained thyroid extract. This gland product is legitimately used where the patient's thyroid gland is deficient. In all cases medical tests should be made to determine such deficiency. If used where no such deficiency exists, it may do untold harm.

Introduced by protosil, an almost endless variety of sulfa drugs has followed. But they must be administered under very careful supervision, else they can produce damage to many different organs and functions of the body. The most frequent damage has been the destroying of the white blood cells, which protect the body from bacteria. Children are especially susceptible to this damage to the white blood cells. Along this line, a most notable result in the armed forces of the second world war was that the germs acquired a marked resistance to the drugs so that their use a year or two later had little or no effect in destroying certain strains of streptococci. The kidneys also can be damaged by sulfa drugs. Certainly these are not drugs to be used in self-medication. They are far too dangerous for this.

Penicillin is much less harmful than sulfa drugs; but after a time bacteria, which it usually destroys, become accustomed to it and acquire a resistance to the drug. This has also been reported by physicians working among soldiers and sailors in the second world war. The promiscuous and frequent use of throat lozenges containing penicillin or other antibiotic drugs has produced serious vitamin-deficiency diseases. This is because, besides destroying disease germs, it also destroys the "friendly germs" such as the Bulgarian bacillus and other lactic-acid-producing germs in the intestinal tract. These germs, in the intestines, help produce vitamin B complex.

"All along the history of medicine, the really great physicians were peculiarly free from the bondage of drugs." This was written in connection with medical comments upon Sir William Osler's book on

the *Practice of Medicine*. Through numerous editions this book easily held first place in the libraries of American physicians.

On the occasion of the fifteenth anniversary of the founding of Johns Hopkins University, Dr. Osler gave the principal address, entitled "Recent Advances in Medicine." Among other things, he emphasized, as one great advance, the diffusion among the public of more rational ideas concerning the treatment of disease, stating as an interesting psychological fact that "the desire to take medicine is perhaps the greatest feature which distinguishes man from animals."

Continuing, he declared: "Of one thing I must complain,—that when we of the profession have gradually emancipated ourselves from a routine administration of nauseous mixtures on every possible occasion, and when we are able to say, without fear of dismissal, that a little more exercise, a little less food, and a little less tobacco and alcohol, may possibly meet the indications of the case,—I say it is a just cause of complaint that when we, the priests, have left off the worship of Baal, and have deserted the groves and high places, and have sworn allegiance to the true god of science, that you, the people, should wander off after all manner of idols, and delight more and more in patent medicine, and be more than ever in the hands of advertising quacks. But for a time it must be so. This is yet the childhood of the world, and a supine credulity is still the most charming characteristic of man."



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**SOLUTION TO "ARE YOU HEALTH WISE?"  
ON PAGE 25**

|    |   |    |   |    |   |    |   |    |   |    |   |    |   |    |   |    |   |     |   |
|----|---|----|---|----|---|----|---|----|---|----|---|----|---|----|---|----|---|-----|---|
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| 11 | E | 12 | D | 13 | E | 14 | M | 15 | A | 16 |   | 17 | A | 18 | C | 19 | H | 20  | E |
| 21 | M | 22 | U | 23 | S | 24 | C | 25 | L | 26 | E | 27 |   | 28 | I | 29 | E | 30  | R |
| 31 | O | 32 | C | 33 | H | 34 | R | 35 | E | 36 |   | 37 |   | 38 | D | 39 | E | 40  | Y |
| 41 | G | 42 |   | 43 | H | 44 | E | 45 | A | 46 | L | 47 | T | 48 | H | 49 |   | 50  |   |
| 51 | L | 52 | I | 53 | V | 54 | E | 55 | R | 56 |   | 57 | I | 58 |   | 59 | F | 60  | R |
| 61 | O | 62 | C | 63 | U | 64 | L | 65 | I | 66 | S | 67 | T | 68 |   | 69 | A | 70  | E |
| 71 | B | 72 | E | 73 | L | 74 |   | 75 | G | 76 | L | 77 | A | 78 | N | 79 | D | 80  | S |
| 81 | I | 82 |   | 83 | G | 84 |   | 85 | O | 86 | O | 87 |   | 88 |   | 89 | S | 90  | T |
| 91 | N | 92 | O | 93 |   | 94 | O | 95 | R | 96 | T | 97 | H | 98 | O | 99 |   | 100 | S |

**Is It Anything Serious, Doctor?**

*(Continued from page 31)*

In the course of the examination the posture is noted. Posture has more to do with health than many realize. Incorrect posture interferes with proper breathing, retards circulation of the blood, slows down digestion and elimination, and affects the muscle tone of the entire body. Headache and backache may be the results of faulty posture. We have all experienced the immediate feeling of exhilaration that comes from assuming a normal posture and breathing deeply. This affects the entire body. There are also more permanent benefits to be gained from maintaining a correct posture.

The arches of the feet are examined to see whether they are bearing the weight of the body well. Normal arch support means much to comfort in general. Undue fatigue, backache, painful feet, and other forms of discomfort may be due to faulty arch support or broken arches. Much may be accomplished by way of exercise, properly fitted arch supports, and correct footwear, to build and strengthen the arches. The modern shoes with high heels, built for style instead of comfort, are to be condemned. Far too little attention is being given to this important matter even though it means so much to comfort, health, and efficiency. Many an individual whose occupation requires him to be on his feet a great deal and who suffers from undue fatigue and other discomfort might be relieved if proper attention were given to his feet.

Accurate measurements of the height and weight will be made, and their relation to the age noted in order to determine whether the weight is normal. This is a factor that should have special attention, because, after middle age, excess weight is a hazard to longevity. Overweight places an extra burden on the heart, and may lead to disease of this important organ. Overweight individuals are also more subject to diabetes. Overweight is usually the result of excessive food intake, especially of fats and carbohydrates. In other cases it may

be the result of glandular disturbances. In either case the treatment is obvious. It will require strict discipline on your part and cooperation with your physician. This will, in most cases, bring the desired results.

You may wonder why your physician taps your knee with a hammer or with his hand. Testing of the body reflexes is another important part of the examination. There are several definite reflex areas that convey special information. The knee is one of these important reflex areas. Others are the elbow, skin over the inner thigh, the abdomen, the sole of the foot, the tendon of the heel, and the pupil of the eye. Disturbances of any of these reflex areas, such as deviation from the normal or failure to respond at all, will convey important information to the physician. This information is an aid in diagnosing certain diseases of the brain and spinal cord. Again he must evaluate these reflex disturbances in the light of other symptoms and the history of each case.

**Hot Packs for Infantile Paralysis**

*(Continued from page 21)*

**PROCEDURE**

1. The areas to be packed, and how often, are ordered by the physician.
2. Have room warm and free from drafts.
3. Have loin cloth and brassiere on patient.
4. Place breast binder and abdominal binder under patient ready for pinning.
5. Have waterproof layer and outer cover conveniently near.
6. Wring pack dry enough to eliminate free moisture.
7. Spread out to avoid pockets of steam. Apply as quickly as possible; cover and pin in place.
8. Apply packs in the following order: thigh, back, abdomen, chest, shoulder, neck, forearm, hand, lower leg, and foot.
9. Packs are most often applied every two hours and left on for one hour.
10. The doctor will advise when to discontinue packs.
11. Packs are given only during the day. At night the patient should be kept warm with warm pajamas and blankets.
12. When packs are removed, do not dry skin by rubbing, but blot up moisture with a towel.
13. Areas affected must be completely covered, but the joints are kept free.

**PRECAUTIONS**

1. Chilling must be avoided.
2. Handle patient gently. Hold at joints to avoid touching painful muscles. Be careful not to tire patient with too much heat.
3. Waterproof material should be carefully dried and powdered when not in use.

4. Outer material should be well aired at least once in twenty-four hours.
5. Wool packs must be given good care. They should be thoroughly dried and aired during the night. They should be washed with soap and water at intervals.
6. If packs become soiled by use of the bed pan, they should be thoroughly washed, boiled, and dried.
7. The time of quarantine or isolation is generally two weeks. Follow the instructions of the physician and public health nurse very carefully.
8. Hot packs are only a part of Kenny treatment, but they are important when given early.

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In addition to the Sanitariums whose announcements appear in this issue, the following belong to this distinctive chain of health institutions.

Boulder-Colorado Sanitarium, Boulder, Colorado  
Florida Sanitarium, Orlando, Florida  
Forsyth Memorial Sanitarium, 805 N. Gadsden St., Tallahassee, Florida  
Fuller Memorial Sanitarium, South Attleboro, Mass.  
Georgia Sanitarium, Route 4, Box 240, Atlanta, Ga.  
Glendale Sanitarium, Glendale, California  
Hinsdale Sanitarium, Hinsdale, Illinois  
Loma Linda Sanitarium, Loma Linda, California  
Madison Rural Sanitarium, Madison College, Tenn.  
Mountain Sanitarium, Fletcher, North Carolina  
Mt. Vernon Hospital-Sanitarium, Mt. Vernon, Ohio  
Paradise Valley Sanitarium, National City, California  
Pisgah Sanitarium, Box 1331, Asheville, North Carolina  
Porter Sanitarium, 2525 S. Downing Street, Denver, Colorado  
Portland Sanitarium, 932 S.E. 60th Avenue, Portland, Oregon  
Resthaven Sanitarium, Sidney, British Columbia, Canada  
Walker Memorial Sanitarium, Avon Park, Florida  
Walla Walla Sanitarium, Walla Walla, Washington  
White Memorial Hospital, 312 N. Boyle Avenue, Los Angeles, California  
Wytheville Hospital, Wytheville, Virginia

### Wings of Health

(Continued from page 29)

careful Health Department here. Our nurse belongs to that department, and she is most careful in checking to see that no disease is spread. She made me stay in her office two hours this morning just to make sure my 'runny nose' wasn't going to be measles."

The children smiled at Betty's remark, and Allen said, "We want to be ready to thank our Public Health director for the careful work the people are doing in his department." Allen glanced out the window. "Now I see that the school bus is ready to take us to town. Is everyone ready to go?"

"Yes!" came a chorus of voices.

To the Boys and Girls of Our LIFE AND HEALTH Clubs:

We appreciate so much hearing from each of you, and want you to continue sending us pictures of your clubs and your activities. Here are some new names for the Pen Pal Club.

AUNT MADGE and AUNT SUE.

|                  |                          |
|------------------|--------------------------|
| Albert Fernandez | Thomas Ong               |
| Capiz, Capiz     | c/o Chap Fall Hin        |
| Philippines      | 20 Market Street         |
|                  | Kuching, Sarawak, Borneo |
| Elito Urbina     | Solomon Bhavath          |
| Orange Walk      | Cane Farm                |
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| Main Street      | Trinidad                 |
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## *Response to Spring*

Welcome spring—a tonic after winter's lethargy. All nature responds. New life pulsates after the long sleep. Furry wild animals emerge from their lairs. The good earth pushes up its carpet of green, and daffodils nod "Howdy" to the passer-by. The sun shines a bit brighter, the mercury rises a bit higher, and hearts feel a bit younger and gayer—in the spring.

And remember—to keep that alert, vigorous, "good-to-be-alive" feeling, take time for that annual health check-up.

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