

APRIL

\* Diet for Ulcer

★ Care of Dry and Oily Skins

★ Home Treatments for Arthritis

★ Eat Right and Live Longer

★ Hernias—Causes and Treatment

\* Your Child: Friend or Foe





In replying to advertisements, please mention LIFE AND HEALTH.

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#### COMING NEXT MONTH

Acute rheumatic fever, that great enemy of children and youth. . . . What to do if fire breaks out in your home. Every housekeeper should know how to prevent fire when it threatens the home. . . Nerves are not always responsible, for it may be high blood pressure. Your doctor answers questions on this subject. . . . May LIFE AND HEALTH discusses symptoms of acute appendicitis, in the first of a series. . . . Your car gets a checkup at regular intervals. Why not your body? It is a simple plan of health insurance. . . . Sweets without sugar. . . . To overeat is to overburden the heart. Diet materially influences the ability of the heart to meet the demands made upon it. . . . What would happen if you sprained your ankle? An acute sprain is a common injury, but most commonly mistreated. . . . Are coffee and soft drinks harmful? Do they have food value? . . . Select your menus in May from those given in your May LIFE AND HEALTH.

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#### The PULSE OF LIFE & HEALTH

- ▶ Is your problem one of a dry or an oily Or is it acne? Dandruff? If so, you will find some helpful suggestions. See page 6.
- ► THERE is no single cure-all for arthritis, that disease which affects nearly seven million people in the United States. But all can be informed of the way to ease the pain by simple treatments in the home. Page 8.
- An ulcerated stomach may be relieved by a careful diet and the avoidance of excessive worry or excitement. Read how to give the ulcer a chance to heal. Page 10.
- ▶ You will get some helpful ideas from the telephone conversation between a worried mother and her physician, when your child contracts scarlet fever. See page 11.
- AMERICA's favorite indoor sport is eating. Maybe you never stopped to think that what you put into your stomach has a real bearing on the length of your life. If you wish to live long, eat right. See page 12.
- ► What are the four types of hernia? Read specifically about the abdominal hernia, its symptoms, treatment, and remedies. Page 14.
- ► Your kidneys are largely responsible for that internal equilibrium so necessary in the body. The normal healthy kidney will remove only the excess and leave the rest. See
- ► THESE ration-conscious days place such foods as cereals, legumes, and vegetables upon our tables. Strange as it may seem, these foods are the most beneficial. See page 17.
- ▶ How your child behaves away from home may reflect the way you behave at home, especially the way you behave toward him. The most important element in his mental adjustment is your relationship to him. See page 18.
- ▶ GLASS cooking ware is rapidly replacing aluminum. Learn how to make it live long. And how to make your cutlery last longer. Page 20.
- ► Why is beer harmful? Page 22.
- ► THE Mother's Counselor gives advice on controlling the emotional habits of wee children. Page 24.



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#### A Much Debated Subject Receives Calm Study

UCH printer's ink, and of late much advertising money, has been expended in seeking to prove the primacy of meat in the dietary field as regards that important food element, protein. A long controversy has been carried on between those who believe a meat diet superior and even imperative, and those who believe that a wholly adequate diet can be secured from nonmeat sources. When the importance of vitamins began to be realized, the proponents of a meatless diet found themselves at a vantage point. The nutritionists grouped vegetables and fruits with milk and eggs and called them the "protective" foods because of their great significance in regard to vitamins. Thus far meat has not been placed in this preferred group.

However, there is much more to food than vitamins, as we stated in last month's editorial. The importance of protein, the body-building element in the diet, is very great. It is essential to life. Recent years have revealed that protein is really not one but many, the parts being known as amino acids. Some of these are more significant in the diet than others. At least present knowledge seems to indicate this. Now meat contains these significant amino acids in greater concentration than do most nonflesh foods. Hence a meat diet is superior, according to the advertising of the meat packers. In fact, they would have us infer that a lack of meat in the diet is really little short of a calamity. Not only will a person lack the best quality of protein, but he will likely lack in quantity, the advocates of meat hurriedly concluded.

But first conclusions are often not the last conclusions. This seems to be the case here. Further work is constantly being carried on in this field. One of the latest investigations was that conducted by Dr. Frederick J. Stare and Dr. George W. Thorn, of Harvard University and Peter Bent Brigham Hospital, Boston. Their work was conducted under the auspices of the Office of Scientific Research and Development and the Harvard

Fatigue Laboratory.

The subjects of the experiment were twenty-four "physically normal young men" from a Civilian Public Service Camp. "The men were divided into three groups of eight men each. The normal control group subsisted on the camp diet, which . . . provided an average of 100 gm. of protein a day. The low-protein group subsisted on a diet from which all meat, eggs, fish, nuts, legumes, cheese, and almost all milk were excluded. Their diet consisted essentially of cereal products, potatoes, other vegetables, fruit products, and oleomargarine, with not over 4 oz. of milk and cream a day. The high-protein group was encouraged to replace low-protein foods with foods rich in protein, such as meat, milk, cheese, eggs, nut products. ... The experimental regime was followed for two months. Then for two weeks, the normal group continued on a normal diet, the high-protein group reverted to normal, and the low-protein group turned to high protein. No attempt was made to limit total caloric intake."-American Journal of Public Health, December, 1943, article, "Some Medical Aspects of Protein Foods."

The low-protein group averaged 50 gm. daily of protein, all of it nonanimal in origin except 4 or 5 gm. in the form of milk. The normal group "averaged 100 gm. of protein intake, of which 60 gm. was animal protein. The high-protein group had an average daily protein intake of about 160 gm., mostly animal protein. No members of the low-protein group, not even the hardest worker, who averaged about 5,500 calories expenditure on

(Continued on page 34)

#### NEWS

#### IN SMALL DOSES

- ▶ How great is the task of the Red Cross during wartime. In 1944 it must supply some 5,000,000 blood donations. Each month, 2,500 nurses must be recruited for the Army and Navy. The Red Cross serves at home and overseas. Food parcels for prisoners of war must be packed, surgical dressings made, and the thousand and one details of administering a far-flung, busy organization must be attended. During March the American Red Cross will raise its 1944 war fund. A goal of \$2,000,000 has been set. Let's give to the Red Cross
- ▶ On December 20 a U. S. Merchant Marine liberty ship, the Sir Frederick Banting, was launched at the Bethlehem Fairfield shipyard in Baltimore. Diabetic patients are especially grateful to Doctor Banting for his medical research in the field of diabetes.
- ▶ It was recently announced by Benjamin Y. Morrison of the U. S. Bureau of Plant Industry that cinchona seeds rescued from the Philippines have produced about 200,000 seedlings, which have been distributed to neighbor republics for planting. Some of these are growing in the Department of Agriculture research station at Glen Dale, Maryland.
- ▶ Our Government maintains a national leprosarium at Carville, Louisiana. Experimentation has been carried on here for some time with promin, a chemical relative of the sulfa group of drugs, which appears to offer hope for the ultimate conquest of this dreaded disease.
- ▶ THE president of the Better Vision Institute says that we begin to grow old as soon as we are born, that after forty the youngest part of the body probably is the eyes.
- ▶ Would you like a corsage of potato blossoms? To promote the planting of potatoes in France, when that vegetable was first being introduced there, a Frenchman with an eye for business secured the co-operation of King Louis XVI. The king wore potato blossoms in his coat lapel, and the queen wore them in her hair. Eventually the cultivation of the potato got under way.
- ▶ Borden's Review of Nutrition Research states that honey has been found to contain valuable vitamins and minerals. The minerals present include iron, copper, sodium, potassium, manganese, calcium, magnesium, and phosphorus. The vitamins present are primarily vitamin C and B complex vitamins.
- Much interesting lore has sprung up about the eyes and their revelation of character, says Better Vision Institute. Eyes that slant upward and inward are said to indicate secretiveness, whereas eyes that slant downward and outward are alleged to have an open, confiding character. People with small eyes have originality; with medium eyes, sagacity and determination; and with large eyes, attentiveness and emotionality. Eyes close together are said to indicate a practical observer of details; eyes far apart, courage and willfulness. Gray eyes are said to indicate a calm spirit; blue eyes, a light heart; brown, a love of humor; green, both an intellectual and a jealous nature; and dark eyes, excitable, emotional, and vivacious dispositions. All of which makes delightful reading, nothing more.





H. M. LAMSERY A Clear Skin Is Greatly to Be Desired and Can Generally Be Acquired by Healthful Living

DEFORE discussing the special problems caused by skins that are too dry or too greasy, we believe it is necessary to discuss briefly the production of oil on the surface of the skin. Opening into every hair follicle on the surface of the body is the mouth of an oil, or sebaceous, gland. These glands secrete an oil which is to be sharply distinguished from perspiration, which is the secretion of the sweat glands. This oil forms the first layer of defense for the skin, for it prevents the evaporation of the fluid from the superficial layers of the skin. When oil is lacking and the skin is exposed to air, especially to wind, the skin becomes too dry, or chapped. Oil glands are found on all portions of the skin except the palms and the soles. They are most numerous on the nose and on the adjacent portions of the cheeks.

\* President, Social Hygiene Society, Washington, D. C.; consulting dermatologist, United States Public Health Service; Professor of Dermatology and Syphilology, Howard University. To some extent the secretion of oil is dependent on the blood supply, which in turn is controlled by the nervous system. This secretion is definitely increased by heat and checked by cold. The oil is chemically very different from the types of oil that are consumed in the food; nevertheless an oily diet does seem to cause an oilier skin. Obstruction of the exits of the oil glands, caused by lack of cleanliness and especially by the accumulation of grease and powder, will result in a backing up of the secretion and dryness of the skin.

Some children are born with blue eyes and some with brown eyes. Some have curly hair and some have straight hair. Hence, it is not surprising that some have more grease glands than do others. As an extreme example of congenitally dry skin there must be mentioned the so-called "fish-scaled man," often seen in the side shows at the circus. Physicians call this ichthyosis, and know that it is due to an

## The Care of DRY AND

A HENRY H. HAZEN, M. D.\*

absence of both grease and sweat glands of the skin. Such persons do not stand well the heat of the summer, for there is no cooling of the surface by the evaporation of sweat. Also, the skin is irritated easily and hence may be very itchy. Frequent oiling is necessary to keep the victim comfortable.

There are many grades of ichthyosis. When the condition is much milder, it is spoken of as xeroderma. This may be congenital, or it may be due to some disease which results in malnutrition. At times one sees babies with long streaks of extreme ichthyosis, not infrequently extending down the forearm, hand, and one finger. Sometimes there are a number of parallel stripes around one or both sides of the body, in much the same fashion as the coat of the zebra or tiger.

Marked thyroid deficiency in children gives rise to cretinism, a condition marked by arrested physical and mental development. The skin is abnormally dry. A correct diagnosis and the use of thyroid extract will effect a cure. General undernutrition or the lack of specific vitamins will also cause very dry skins.

Oily skin in the baby or young child is usually a problem only immediately after the birth of the child. In past years it was customary to wash the newborn babe with warm water and a mild soap, but now many physicians advise an early period of watchful waiting, claiming that the oil is a protection.

The skin very rarely secretes grease before the time of adolescence, but the application of much oil to the hair or body may induce the appearance either of blackheads or of a mild seborrhealike eruption.

A dry skin that is acquired in adult life may be due to many causes, to more than can be enumerated in this short and sketchy article. Prominent among these are:

1. Old age, during which period of life the skin usually becomes much drier and less pliable.

2. Too much exposure to the elements—dry wind and sunshine, especially in a warm climate, salt water, and intense cold. Every observant person knows the rough, brown, thickened, and lined condition of the back of the old-fashioned dirt farmer's neck. Too many hours of sun tanning can do the same to our young people

### OILY SKINS

who expose themselves hour after hour at the beaches. Continued exposure to cold can do the same.

3. Living and working in an atmosphere that is overheated and that lacks humidity, an atmosphere where the furniture falls apart and the leather bookbindings undergo dry rot.

4. Too much soap and water, with or without the scrubbing brush, and especially the use of a strong or abrasive washing soap and powder which can overdry and damage the hands and forearms for

a long time.

5. The combination of a foundation cream and face powder. This makes a wonderful cement that plugs up all the openings of the grease glands, just as a cork does a bottle neck, and the skin becomes dry. Not infrequently spines of cream and powder will protrude from the openings, just like tiny porcupine quills. The remedy is obvious: Wash the face with soap and water or cleanse it with an alcoholic solution until the plugs are dissolved.

6. The use of paint, turpentine, thinners, driers, and the like. These can cause marked overdrying. Cleaning the hands with a little fuel oil, if it can be obtained, is preferable to scrubbing with strong soap and hot water.

7. The various polishes. Shoe, metal, and furniture polish will, in many in-

stances, cause trouble.

8. Washing green vegetables or the dishes or even stockings and underwear. Such chores rank among the most common causes of chapped hands and forearms.

 Rubbing alcohol and hand lotions made of soap and alcohol. Ointments and lotions containing too much mercury, salicylic acid, sulphur, acid, or alkali will dry the skin, often for long periods.

10. Gardening, which may cause dirt to enter the openings and mechanically close them.

11. Lack of vitamin A in the diet. Its absence will produce hard, dry plugs in the skin. Re-

member that vitamin A is a fat-soluble vitamin and that it is largely supplied by dairy products, some green vegetables, and liver. Also recall that the daily taking of mineral oil for constipation will dissolve much of this vitamin and prevent it from being absorbed by the body. Do not take any mineral oil daily.

12. Lack of thyroid secretion. The amount of secretion can be determined by having a basal metabolic test done by a physician. If this is low, thyroid extract will remedy the trouble.

13. Any disease that lasts a long time, or even for a period of several months.

14. A long period of undernutrition, even if not caused by disease. The obvious moral is, watch your diet.

Persons with dry skins must take certain precautions. The use of soap and hot water must be held to a minimum. Cleansing should be done with a boric acid solution or with almost any oil except machine oil. When water is necessary it should be lukewarm. Any substance that burns or irritates should be avoided. No wool should be worn next to the dry skin. The skin should be kept greased with a bland oil or grease such as olive oil, baby oil, white vaseline, toilet lanolin, or a soft, greasy cold cream.

Oily skins are much more frequent in some races than they are in others. The dark-skinned Negro usually has an abundance of oil, much more than the lightskinned mulatto. Apparently the male and female are about equally affected. Excess oiliness usually appears at the time of adolescence and tends to decrease when one is past twenty-five. It has been estimated that about 20 per cent of the young have somewhat increased oil secretion. Undoubtedly exposure to heat causes more activity of the grease glands. Oily skins are especially liable to develop acne or a type of inflammatory dandruff. The one comfort about greasy skin is that it does not sunburn so badly as does a dry one. It is less susceptible to such serious affections as cancer and the various disabilities produced by occupation.

To some extent too much oiliness can be controlled by diet. Chocolate and whipping cream seem to be the chief offenders in producing this condition, but fried foods and an excess of salad dressing, butter, nuts, rich desserts, cereals, and meat fat should be taken in small amounts. Drying lotions, whose active principle is usually sulphur, salicylic acid, or resorcinol, may be used. Some sunlight in summer or ultraviolet light in winter is beneficial. Frequent changes of clothing are a slight aid. Personal cleanliness should never be neglected, although it is doubtful if soap removes the oil for more than a few minutes.

It should be borne in mind that a naturally dry skin can be made greasy by certain occupations or by the too-free use of most of the cold creams, still marketed

> in unlimited quantities by the various beauticians. One cannot help wondering what would happen if the fats were demanded from milady's dressing table in the way they are from her kitchen. And what a black market in creams might arise! One also wonders what has become of the Government's promises to reduce the number of cosmetics to a few basic ones. How much better off the purses of the women would be (Continued on page 30)



H. M. LAMBERT

A Dry Skin Should Have Regular Applications of a Bland Oil HE diseases loosely classified as rheumatism, which include muscle and joint disease, have some 6,850,000 sufferers in the United States. This is almost double the number of chronic cases of the nearest competitor—chronic heart disease.

There are two kinds of arthritis. The one which is found in young persons produces swollen, painful joints that tend to stiffen, and the bones grow together or ankylose; the other is found in individuals who are usually middle aged or older. In the latter type the large weight-bearing joints, such as the hips, spine, or knees, are often involved. This type is very annoying and painful, but the bones do not fuse together.

Arthritis is a disease affecting the whole system, with local manifestations in the joints. That is, the person is sick all over, the same as in tuberculosis. But in arthritis the most active form of the disease is found in the joints, while in tuberculosis the most active form of the disease is in the lungs. The treatment of arthritis follows the same fundamental program as that used for tuberculosis—rest, proper diet, and general measures to build up the body's resistance. There is no specific remedy for arthritis any more than there is for tuberculosis.

If the arthritis is in the small points of the hand and wrist, or bones of the foot and ankle, then alternate hot and cold baths will be found especially helpful in reducing the congestion and swelling and in promoting a more normal blood flow through the diseased part. For the one thing common to all arthritis joints is the impaired circulation. True, in the beginning the joint may be swollen and red and feel hot, but this is not for long. This is soon followed by a decrease of blood flow through the injured part.

Use two large buckets or any convenient containers, one filled with hot water between 105° and 110° F., the other with tap water which is about 60° to 70° F. Place the feet or hands in the hot water for three minutes; then quickly change them to the cold water and keep them immersed for one-half minute. Next place them in the hot water for three minutes, then back to the cold again, alternating from hot to cold until five to seven changes have been made. (See first of series of sketches at bottom of next page.)



## Simple Home Treatments TO EASE ARTHRITIS

There are, however, some simple remedies that will aid the individual suffering from arthritis. To realize that no one has one single remedy that will cure arthritis will save the patient and his family much grief, time, and money. This knowledge will also cause one to consider and follow faithfully each detail of the program as outlined by his physician.

Not long ago, while visiting a world-renowned clinic in the East, I was much impressed by the time spent in training the arthritis patient to know what to do for himself at home. The greatest stress was placed on the fact that though the remedy was only a simple one, if the patient would perform the task daily, he would obtain marked benefit.

With this in mind I wish to present some of these simple things that can be done, not as a cure-all for arthritis, not as a substitute for your doctor's care, but as a supplement—an adjunct to a well-rounded program.

The following equipment is needed: (1) two containers, (2) hot and cold water, (3) bath thermometer. The containers should be large enough so that the water may cover well the calves of the legs and reach as near to the knees as possible. For the hands it is well to include the forearm and elbow if possible.

In arthritis the treatment always should end in the hot water, especially when first starting the use of alternate hot and cold. This can be carried out morning and evening or even three times daily with no ill effects. Should the higher temperature of 110° F. seem to produce more swelling, then use the lower temperature of 105° F., or decrease to two minutes the time that the part is immersed in the hot water, and increase the time to one or one and a half minutes for the cold.

In fact, for the extremely painful joints early in the disease we may not use heat at all, but rather pack the joint in ice for two or three days. Use chipped or cracked ice in a large turkish towel placed around the joint, which is protected by flannel cloth. If you wish, crush the ice very fine to permit putting it in hot-water bottles; then place them about the swollen member. When the swelling and pain have subsided, the use of alternate hot and cold baths may be begun.

Fomentations are an easy method of applying moist heat, and this is one of the finest methods of relaxing muscle spasm, which often accompanies arthritis, as well as allaying the pain of the joint itself.

The fomentations are made from woolen cloths cut in three-foot square pieces. Each fomentation consists of two parts. The inner portion is wrung as dry as possible from boiling water, illustration (a), folded as shown in illustration (b), covered and rolled up in the dry square as shown in illustration (c). Use a double towel as a protection to the skin, and apply the fomentation over the affected part, as hot as can be borne. When the



one to the back and shoulder and another one to a hip and knee.

Another form of heat which is very easy to apply, but has the disadvantage that one must move it from one part of the body to another, is the use of the infrared lamp. A related form of light treatment may be given with a homemade heat cradle, using ordinary electric light bulbs. See illustration of "heat cradle" below.

Following the use

Arthritis Is a Malady That Affects All Ages and Classes of People stroking is always in the direction of the returning blood, or toward the heart. Again, remember to start massage above the injured joint and work toward the extremity of the arm or leg, as the case may be.

After the stroking massage, which requires about five minutes, the joint is carried through as full a range of motion as possible. For instance, in the case of the shoulder the arm is brought away from the side of the body and raised up toward the side of the head or as far as it is possible to raise it, then returned to the side. It is then carried backward as far as possible, then forward as far as the arm will go. Lastly the whole arm makes a complete circle just *once*.

The exercises for any involved joint would be simply to carry that particular joint through the fullest range of motion possible for that joint. As soon as any motion at all is possible in the diseased joint, these exercises should be started. It is important not to overdo at first. If

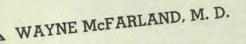
pain and swelling are aggravated so that they last for more than eighteen hours, the exercises have probably been overdone.

Usually the arthritis patient has fallen into the habit of performing "wiggles" with his joints rather than any real movement. Moving the joint through its full range *once* a day is of more value in *preventing* adhesions and atrophy of muscles than a thousand wiggles.

Twice a week the arthritis patient is to take a hot tub bath—the water should be between 104° and 106° F., and the patient

should remain in the tub ten or fifteen minutes, depending on the tolerance in each individual case. Following the hot tub bath, massage and exercise, as described previously, are given. On the day of the hot tub bath, the patient may forgo the use of other heat measures. added feature to the treatment is the daily use of sun baths. We feel certain that the use of sunshine has a marked toning-up effect on the muscles, as well as being an excellent method of building up resistance in the body. The sun bathing is done preferably in the morning from ten to eleven o'clock or after two or three P. M. rather than in the midday. Full body

(Continued on page 34)



fomentation becomes comfortable, then dry the surface and apply another fomentation.

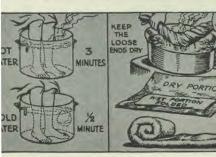
After the last fomentation, usually the third or fourth, has been applied, end the procedure either by using a washcloth wrung from cold water or, if the patient can tolerate it, by rubbing the surface with a piece of ice. Dry the part well at the end of this procedure.

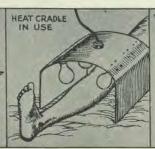
Fomentations will produce a marked reddening of the skin. This shows that the circulation has been increased in that area. Thus the part is prepared for massage and exercise. One advantage of fomentations is that one can apply several fomentations at one time, for instance,

of some form of heat, which should last twenty to thirty minutes in order that the maximum benefit from its use may be derived, simple stroking above and below the joint will help further to reduce the congestion that is present. This is called effleurage. The method of performing the massage, or stroking, of the knee is to start above the knee and stroke from about the lower half of the thigh up over the hip joint. Then *skip* the ailing joint and stroke up from about midway of the leg to the knee.

Massage Helps to Reduce the Congestion

To start massage directly over the joint itself is not wise. In approximately one week one can begin very light stroking movements over the diseased joint. The













**APRIL**, 1944



#### Soothing Balm for SORE STOMACHS

Diet for Ulcers

A WINEA SIMPSON, M. D.

He Seeks a Quiet Retreat in a World at War

TITH the hustle, bustle, and nerve strain of a world at war, and the increasing consumption of tobacco and alcoholic beverages, it is not surprising that from many quarters come reports of the increasing incidence of peptic ulcer.

Stomach ulcer is an acute process, healing rapidly and spontaneously, and each new attack of symptoms is due to a new ulcer. The only ulcers which do not heal and in which symptoms do not disappear are the ones with complications. One of the primary reasons for the frequent recurrence of peptic ulcers is that the patient does not have sufficiently impressed upon his mind the fact that a careful diet and the avoidance of excessive strain, worry, and excitement must be his rule throughout life if recurrences and serious complications such as hemorrhage, perforation of the stomach, or obstruction are to be avoided.

The principle underlying all dietetic treatment of stomach or duodenal ulcer is to nourish the patient adequately and at the same time give the ulcer a chance to heal. To achieve this purpose the following rules are laid down:

1. Avoid all foods that will chemically irritate the ulcer. Any food which stimulates the stomach to secrete large quantities of hydrochloric acid is irritating to an ulcer. Among these chemical irritants are spices and all highly seasoned foods, strong acids, such as vinegar, strong fruit acids, pickles, meat and meat broth,

#### Menus FOR UNCOMPLICATED ULCER CASES

#### Breakfast

Luncheon

1 tablespoon olive oil

l glass milk

Cereal-strained oatmeal with cream

Egg-soft boiled or poached

1 tablespoon olive oil I glass milk Creamed cheese or egg

1 tablespoon olive oil 1 glass milk

Enriched bread with margarine

Strained vegetable Potato-mashed with cream or baked Pudding

Enriched bread or toast with vegetable

#### Midafternoon

Crackers Stewed fruit

margarine

Fruit juice or bland fruit

1 tablespoon olive oil Creamed soup-potato, rice, noodle, or Coddled egg Toast and margarine Apricot or banana whip

gravies, concentrated sweets, all fried foods, pastries, alcoholic beverages, and tobacco smoking. There is no question whatsoever that smoking is a hindrance to healing. After smoking, the acidity of the gastric contents of patients with peptic ulcer has been proved in some instances to be twice that of the acidity before

2. Avoid all foods that will mechanically irritate the ulcer. Among the mechanical irritants are foods with tough fiber, such as coarse vegetables, the pulp and seeds of fruits, and bran-containing cereals. Overeating or gas-producing foods may cause pressure pain due to distention of the stomach walls. Foods

too hot or too cold are also irritating.

3. Use foods which are known not to stimulate the secretion of hydrochloric acid and which depress as far as possible its concentration. Fats in the form of cream and olive oil are used to depress the flow of acid in the stomach. Protein in the form of milk and eggs is used because this type of food combines readily with the acid of the stomach and reduces the free hydrochloric acid.

4. Serve four meals a day in moderate quantities, to control both the peak of acidity and the deep hunger contractions.

5. Specifically, a lack of vitamin C and protein has been noted in ulcer cases, and (Continued on page 29)

RS. ANDREWS was all agog. Her pride and joy, ten-year-old Bill, played with Mrs. Nelson's Jimmy all afternoon the day before yesterday, and today came the startling news that Jim was quarantined with scarlet fever. What to do! And so she phoned to cast her worries at the feet of her family doctor. After a recital of the awful facts the conversation went on like this:

Mrs. A.-Do you think that Bill will take it, Doctor?

Doctor.-I don't know, Mrs. A., but if he does, it will probably be light. You remember about a year ago we tested him for his susceptibility to scarlet fever-he had the Dick test-and the reaction indicated that he still possessed a degree of immunity against the disease. You gave him some protection against it, and it may save him now.

Mrs. A.-What do you mean, "I gave him protection"? He was never vaccinated that I know of.

Doctor.-No, we never vaccinated him, but you provided immunity for him before he was born. You see, through the mother, most newborn acquire immunity from both scarlet fever and diphtheria. However, many children lose this immunity as the months roll along, and become susceptible. The Dick test answers the question-tells us whether or not the conferred immunity has stuck.

Doctor.-Usually the onset is quite sudden-the most common initial signal is vomiting. It may be preceded by slight, scarcely noticeable indisposition. But in the main it hits with a bang. He will develop a headache and sore throat; the temperature will go up rapidly-it may even reach 104° F. or over in the first twentyfour hours.

Mrs. A.-My, that is terrible! How long does the fever last?

Doctor .- Oh, just a few days. Now, through the use of sulfa drugs, the temperature is knocked out quite rapidly.

Mrs. A.-When could we expect the rash?

Doctor.-The eruption usually appears on the second day. It has the appearance of scattered red points on a flushed surface. Look for it on the neck and chest first. By evening of the second day it may have spread over the entire body. The face may escape entirely. Sometimes it is patchy-does not cover the entire

Mrs. A.-How long does it last? Doctor.-The rash persists for two or three days, then gradually fades. In rare instances it lasts only a few hours and is

Mrs. A.-What is the strawberry tongue I have heard about?

Doctor.-Oh, the tongue has a dirty coating, of course, as in any fever, but through the "fur" you can see swollen,

AFTER SCARLET FEVER

BERTHA McC. THIEROLF

I've drawn a ring around the date

To live—and in a brand-new skin!

Nicest people do not "peel";

shall, rather, "desquamate."

When I shall once again begin

It is not a bit genteel.

bright-red points. And the tip shows swollen strawberry-red points.

Mrs. A.-Is it a germ disease, Doc-

Doctor.-Yes, it is a streptococcic disease, and all the complications are due to the same germ.

Mrs. A.-What about tonsils? Is

the child without tonsils safer from scarlet fever than the one who keeps them? Should Bill's tonsils come out?

Doctor.-No, there seems to be no significant relationship between the presence or absence of tonsils. We shall forget Bill's tonsils for the present.

Mrs. A.-Is scarlet fever a dangerous disease from the viewpoint of an aftermath? You doctors have a word for it-(Continued on page 30)

A Troubled Mother Asks the Doctor Some Questions About

Scarlet Fever

ARTHUR N. DONALDSON, M. D.

Mrs. A.-And you say Bill's test was all right. But that was a year ago. How do we know it still protects him?

Doctor.-Time only will tell. He must be quarantined for ten days. If nothing happens in that time, it probably means that his immunity still holds good.

Mrs. A.-Do people become less susceptible as they grow older?

Doctor.-Well, the serious cases are all under ten years of age-about 90 per cent, it is estimated. Many escape in childhood and get caught in adult life. Some never

Mrs. A.-Now what am I to look for in symptoms? If Bill gets it, how will it hit him?





by Presidential appointment, Chief of the Bureau of Human Nutrition and Home

Economics of the U.S. Department of Agriculture, once wrote: "Aside from all questions of nutritional need, eating has an immense vogue as an amusement." It is America's favorite indoor sport. With vim, vigor, and a healthy appetite, eating is, and should be, a pleasure. But its real objective is the nourishment of the body, to maintain it in the best working order, to give maximum attainment of intellect, courage, mental balance, and the full physical powers of strength and endur-

For many years Doctor Sherman has been engaged in ascertaining what is needful in the nourishment of the human body for the production and maintenance of rugged, buoyant health and for the prolongation of the prime of life at its highest productiveness. In this quest at Columbia University, he has ascertained scientific facts regarding food and nutri-

tion of the greatest importance for America, needed now more than ever for maintaining and strengthening the man power of America in this world struggle to restore freedom and peace.

Here are the conclusions Doctor Sherman reaches from one such piece of experimental work: "We have families of rats which are thriving in the twenty-seventh [now thirty-fifth] generation on uniform diet-certainly a sufficiently rigorous demonstration that the diet is entirely adequate. Yet on enriching this already adequate diet in certain of its chemical factors by increasing the proportion of milk in the food mixture, there results an improvement in the general nutritional condition, as shown by a whole series of criteria, such as more rapid and efficient growth, lower death rates, and higher vitality at all ages, an increase of 10 per cent in the average longevity of adults,

and greater extension of the prime of life, in that maturity is expedited and senility deferred in the same individual.

"As there has been so strong a tendency to attribute longevity entirely to hereditary factors, it may be worth while to emphasize the fact that here, in parallel groups of exactly the same heredity, the influence of food on longevity is demonstrated with such a degree of mathematical certainty as is represented by chances much better than 10,000 to 1 or with a hundredfold greater certainty than is usually considered necessary for the conclusive establishment of such scientific observations."

This was said of an increase of milk in the daily ration equivalent in the human to the second pint. This is an example of the contrast in the nutritional requirements between good or fair health and rugged, buoyant life with the maximal of strength and endurance and actual extension of the prime of life. The above pertains especially to the great advantages of the calcium in a quart of milk over that in a pint of milk. Sherman carries this same contrast between what is called minimal and optimal requirements through several other nutritional factors. He says:

"For the individual and its offspring to do the best requires far more of vitamins A, C, and G than to prevent the typical deficiency diseases. For complete protection of the teeth, twice as much vitamin C is required as for the prevention of scurvy. To get full protection against infections requires four times as much vitamin A as to prevent typical eye disease, and at least twice as much vitamin G gives improved conditions in nutrition as the amount required to prevent pellagra." This last was written before the discovery of niacin as the antipellagra vitamin, but it still holds true. Note that these statements emphasize that optimal requirements are from two to four times the minimal. These individual nutritional elements, calcium and certain vitamins, are most abundant in the protective foods -fruits, vegetables, and milk. These are the foods on which modern research has thrown so much light and revealed the great advantages of much larger amounts than were formerly considered necessary.

Doctor Sherman very evidently "practices what he preaches," or in this case we may say, what he has discovered. Note this statement in the fifth edition of his book *Chemistry of Food and Nutrition:* "Thus the writer consumed in the course of a year: 1,577 servings of fruit and fruit products (equivalent to two servings each at about half the meals and one at each of the other meals); 275 servings of tomato

or tomato juice; 1,407 servings of other vegetables." He explains that the servings of fruits, vegetables, and their products were of at least average conventional size, so that probably the 3,259 servings, or portions, consumed in the year represented at least 800 pounds of fruit and vegetables as they come to the kitchen door, or the same as the highest levels of fruit and vegetable consumption recommended by the U. S. Department of Agriculture in 1933 or in 1935."

This leads him to conclude: "Thus a food habit guided by the newer knowledge of nutrition, and at the same time affording more pleasure than the more conventional American food habits of the past, and at somewhat less cost, gave greater prominence to fruits, vegetables, and milk, and less prominence to meats and sweets; involved no significant change in the prominence of butter and eggs; and included about the same amount of breadstuffs and cereals as is usually consumed by Americans of similar muscular activity, but used more than half of the breadstuffs and cereals in the less highly milled or whole-grain forms."

Doctor Sherman's personal habit, "guided by the newer knowledge of nutrition," figures out to about nine servings of fruit and vegetables daily: of fruit and tomatoes a little more than five servings daily, and of other vegetables a little less than four servings daily.

There are many other facts regarding the advantages of the greatly increased daily ration of protective foods. Here is one of them, which comes from the Rockefeller Foundation in the book Man, The Unknown, by Alexis Carrel: "The frequency of pneumonia may also be modi-

fied by food. The mice belonging to one of the strains kept in the mousery of the Rockefeller Institute died of pneumonia in the proportion of 52 per cent while subjected to the standard diet. Several groups of these animals were given different diets. The mortality from pneumonia fell to 32 per cent, 14 per cent, and even zero—according to the food."

Note that Sherman says: "To get full protection against infections requires four times as much vitamin A as to prevent typical eye disease." This vitamin is not found in cereal grains except yellow corn meal. It is very poorly represented in lean beef, but is most abundant in fruit, vegetables, and milk. In milk it is present as the preformed vitamin A; in green and yellow vegetables and in fruits, as carotene. But it is not only vitamin A that is needed in such relatively large amounts to prevent infections; the water-soluble vitamins of the C group and the B complex are also very important.

Heaslip of South Australia has shown that the occurrence of scarlet fever, diphtheria, and infantile paralysis is greater with those who eat but little of fruit and vegetables, while there is the least of these three diseases in those eating more freely of fruit and vegetables. Szent-Görgyi found that vitamin C neutralizes the diphtheria toxin and concludes that for buoyant health and protection against this and other infections even twenty times that needed for mere prevention of scurvy gives increased vigor and well-being.

It has also been shown that vitamin C is a large factor in protection against rheumatic fever. This vitamin is the one that can be secured in the fullest amount in uncooked fruit and vegetables. Much of it is destroyed in open cooking. Canned fruits and vegetables sealed before processing retain most of their vitamin C content. In the body only the adrenal gland has any store of vitamin C. This vitamin and the vitamins of the B complex are really not stored at all in the

body otherwise. Therefore an abundant fresh supply must be taken every day in order to keep the body tissues saturated with them.

This saturation is necessary for full

vigor, steady nerves, and even immediate strength. To maintain this saturation requires such amounts of fruit, vegetables, and milk as has been specified by Sherman in the statements already given, namely, one quart of milk and nine servings of fruit and vegetables a day.\* Fruit should be somewhat over half of this amount up to even two thirds or three fourths of the nine servings a day. Modern science has shown that it requires much more than an apple a day to keep the doctor away—or the sicknesses to which, of course, this old



DRINK MORE MILK

USE MORE FRUIT

EAT MORE VEGETABLES

(Continued on page 25)

<sup>\*</sup> A woman of 125 to 130 pounds should eat about four-fifths the amount of food eaten by a man of standard weight (154 pounds).

### HERNIAS

#### What Causes Them? Can They Be Easily Relieved?

#### A LEROY E. COOLIDGE, M. D.

TERNIA, or, as commonly called, rupture, is a rather frequent physical defect. The term "rupture" is somewhat misleading, as it implies that the condition was caused by the tearing apart of the structures. This is rarely the case. Hernia, in the broadest sense, is the protrusion of an organ or part of an organ through its covering wall. An injury to the chest may cause a hernia of the lung, or a severe injury to the head may cause a hernia of the brain. Since these conditions are not common, they are definitely specified when the term is so used. In this discussion we shall consider a hernia as it applies to the abdomen.

There are, ordinarily speaking, four types of hernia. First, umbilical hernia, in which the hernia appears at the umbilicus, or navel, and is usually due to a congenital weakness. This condition is very frequently seen in babies during the first few months. If the infant is properly strapped with adhesive or a suitable truss, this defect practically always disappears. Second, following an operation, when the wound, failing to heal properly, produces a weakness of the abdominal wall and a hernia. Third, inguinal hernia, in which the protrusion takes place above the fold of the groin. This is one of the weak points in the abdominal wall. Here there is a natural opening for the spermatic cord in the male or the round ligament in the female. Owing to the fact that the structures are more bulky in the male, this type of hernia is more common in men. Fourth, a hernia below the fold of the groin. Here is another weak spot known as the femoral ring, an opening through which the great blood vessels-the femoral vein and artery-pass into the thigh. A hernia at this location is known as a femoral hernia. Because of the extra width of the pelvic bones in the female, the opening is larger, and thus femoral hernia is more common in women.

Hernia may occur within the abdomen, as when there is a defect in the diaphragm, thus allowing some of the abdominal organs to pass into the chest cavity.

The cause of hernia may be due to a congenital weakness. The opening into the inguinal canal may be abnormally large. Then when any added strain is placed on this point, the hernia develops. Heavy lifting or severe coughing is frequently the immediate predisposing cause.

There are general considerations which may directly affect the structural strength of the inguinal canal and thus modify the resistance to internal pressure. An individual who has a rugged physique would have better developed muscles about the internal ring and would be less likely to develop a hernia. On the other hand, persons with a soft, flabby musculature in all probability would have a similar condition about the local area, and any added strain, such as a severe coughing attack, predisposes to a separation of the structures.

A hernia is composed of three partsthe sac, the covering of the sac, and the contents of the sac. Whatever organ is protruding is covered by the peritoneal lining of the abdomen and the other layers of the abdominal wall. The protruding layer of peritoneum is called the sac. As this passes through the abdominal wall or along the inguinal canal, the covering is made up of the stretched-out muscle, fascia, and the skin. At the point where the hernia emerges from the peritoneal cavity there is a constricted area known as the neck of the sac. Often this is the danger point, causing a strangulation of the protruding section of the intestine or other organ. Most often in the sac is found the intestine or the apronlike structure in the abdomen known as the omentum. The bladder, an ovary, the appendix, or some other structure may be found in this sac.

The symptoms of a hernia vary, but usually there is a dull aching in the affected area. This is aggravated by coughing or lifting. Only rarely do we note sharp, cutting pain, and that is when the hernia has rather suddenly protruded and cannot be replaced. There may be only a feeling of weakness and fatigue or mild cramp. We may know that a hernia exists if there is a definite swelling visible, and on examination by sense of touch a definite impulse may be noted on coughing or straining. When the causative factors are removed, the mass disappears, but will reappear during coughing or lifting. This means that the organ has been replaced in the abdominal cavity or the hernia has been reduced.

Sometimes hernia cannot be reduced by ordinary manipulation. This means that such a large amount of intestine or other structure has protruded and become swollen that it is impossible for it to return through the small neck of the sac. This may be a very dangerous condition and requires immediate operation. In the more chronic types it may be that the hernia has been allowed to remain out so long that adhesions have formed between it and the sac, and for this reason it cannot be reduced.

Hernia is not without definite danger and handicap. Today practically all large companies make a careful physical examination before hiring new employees. Most of them reject all the men with hernia. This is considered the only safe policy to avoid both the excessive loss of time due to disability and also the possibility of acute strangulation, a real health hazard. As a rule the Army and the Navy reject all men with hernia from regular service. The strenuousness of the service would increase the danger of strangulation, and serious results might develop if proper treatment was not immediately available. Life insurance companies refuse to accept as standard risk those who have hernias which are not properly retained by a truss.

Hernias developing in young babies are usually due to congenital defects, such as a large internal ring in the inguinal canal. The hernia develops because of the increased intra-abdominal pressure produced by the baby's crying. Occasionally it becomes strangulated and requires an operation. Generally a well-fitted truss will keep it reduced, and in a few months, owing to the rapid growth, the opening will close, producing a permanent recovery. If it does not return to normal, it is usually best to wait until the child is old enough to co-operate in the aftercare before doing an elective operation.

In elderly persons, it is often best to fit a truss. A truss is simply a belt or support with properly adjusted pads to create pressure on the point where the hernia issues from the abdomen. Usually, trusses are reasonably comfortable and correct the condition. Rarely do they produce a cure. In the various periodicals there are many advertisements claiming some unusual treatment or device to relieve hernia, with the insinuation that it is a cure. Generally such appliances are only poorly made trusses and are sold at a price much greater than the cost of a good truss made by some reliable firm.

There are so-called rupture specialists who travel about claiming some unusual method for relief. They are more likely to profit by the experience than the hernia sufferer.

The usual and best treatment for most cases of hernia is a surgical operation. Unless the patient has some general disease or excessive obesity, the chance for a permanent cure is very good. The operation has a minimum of risk and can be performed under local, general, or spinal anesthesia. The operation consists of

(Continued on page 29)

THE kidneys are almost solely excretory organs. Although this fact has long been recognized, their method of function and their anatomic structure were imperfectly understood until about thirty years ago, when new discoveries and methods of chemical analysis threw new light upon them. An amazing amount of research has been focused on these organs since that time, with the result that we now know much more about their functioning under both normal and abnormal conditions. Some impenetrable mysteries still baffle us, despite all the involved information now at hand.

To the kidneys the blood brings most of the dissolved waste material within the (That contained within, and excreted from, the intestinal tract is considered as being outside the system.) Many of the materials to be thus excreted are called threshold substances-that is, substances of which only enough is to be excreted to maintain normal blood concentrations, the remainder to be left within the blood. Think of an organ capable of making such a fine discrimination as to remove only the excess and leave the rest! Take salt-just ordinary table salt which is as necessary to the body as is oil to an engine-how can the kidney remove just the right amount and return just the right amount under all circumstances of intake, fluid drinking, perspiration, etc.? Or how can it

If it is impossible to tell you all, we can at least tell you something of these remarkable organs. The question of balance, or equilibrium, by which the body maintains just the right internal environment, is something to stagger the imagination, like the contemplation of infinite space.

remove the right amount of

sugar or urea?

Anatomically the kidneys seem like relatively simple structures. No internal secretions are produced, so far as we know. They are attached to blood vessels—renal arteries carrying blood in and renal veins carrying blood out. What happens to the blood in its trip through the kidney is the processing known as kidney function.

Blood from the general circulation enters the kidneys through the renal arteries, which divide and subdivide until they form capillaries, the smallest of blood vessels. At certain points the capillaries become massed and convoluted into tufts, called glomeruli. Each tuft is surrounded by a capsule, which is the first portion of the urine-collecting system of the kidney. This capsule and the tubule leading from it might well be compared to a rivulet, which has its origin in a spring, the glo-

merulus. Many such tiny streams unite, finally producing the main stream, or river, of which the ureter, or main channel leading from the kidney, is an exact counterpart.

Not only fluids but many substances, such as salt, sugar, and urea, carried in solution by the blood, are readily filtered through these glomerular capillaries to the surrounding capsule and thence to the tubule which leads from the capsule. At a certain point this tubule becomes twisted, or convoluted, into several folds, referred to as the first, or proximal, convoluted tubule, which is surrounded by a rich network of capillaries. Through these the body is able to reabsorb from the tubule those dissolved substances which it needs for its vital processes. This is a highly specialized discriminatory procedure, which enables the body to reabsorb only as much as is actually needed and permit the remainder to escape into the urine.

The method by which reabsorption is accomplished is somewhat obscure, but it appears from the brilliant researches of several investigators that both physical and vital factors participate. After the reabsorption process the remaining fluids and dissolved substances not needed by the body, collectively make up the urine. They are conducted through collecting tubes and eventually discharged into the

CORRECTING MISTAKEN IDEAS

### Your Kidneys

A Commander James J. Short, M. D.

funnel-shaped ends of the ureters, or ducts, which lead to the urinary bladder.

In view of these well-known facts about kidney function, we see that the exercise of the kidney tissue should be no more harmful than the exercise of brain or muscle tissue.

Urine contains a large number of substances in solution, of which about 70 per cent are urea and salt. Urea is a harmless, nonirritating compound formed from proteins such as meat, eggs, and cheese. It acts as a diuretic, or kidney stimulant, and for this reason has sometimes erroneously been assumed to be harmful to kidney tissue.

Kidney tissue, like that of other organs, consists of cells made up of protein. It has been found that, although brief periods of protein curtailment in the dietary are sometimes beneficial, to deprive such cells of protein for long periods by the semistarvation diets so frequently advocated in the treatment of kidney diseases,

will eventually impair their structure. Indeed, improvement in kidney disease has frequently been produced by high protein diets following periods of curtailment instituted in the hope of sparing the kidneys from excess work.

Salt, when taken into the system, promptly goes into a dilute solution which approximates in strength the concentration of the body fluids called "physiologic concentration." When there is an excess of salt or insufficient fluid for this concentration, thirst is experienced and fluids are taken. There is no more evidence that a physiologic salt solution damages the kidneys than that tears damage the eyes; in fact, such a solution is almost identical with tears.

The kidneys are so essential to life that it is desirable that they be given proper consideration. As with most vital organs, nature has been provident in supplying us with an abundance of kidney tissue. One kidney can be removed and, provided the other is healthy, no evil consequences will ensue. A damaging attack of nephritis, or inflammation of the kidney, may be sustained as the result of some remote infection, usually a streptococcus infection of the tonsils, throat, sinuses, or teeth, and recovery may be so complete that no further evidence of kidney disease will ever be detected. The kidneys usually outlast most of the other vital organs of

the body, even without special attention.

Many false ideas regarding kidney function are still prevalent among the uninformed. Among these are the ideas that all kidney disease is accompanied by pain in the lower part of the back, that the kidneys must occasionally be stimulated by diuretics to increase activity, and that protein and salt are harmful because they increase the bur-

den of the kidneys and thus tend to produce disease and early breakdown.

These ideas are almost wholly without foundation. Kidney disease rarely produces pain in the back. Usually the earliest manifestation of kidney disturbance is the presence in the urine of such substances as albumin, blood, and casts, which are detectable only by urinalysis. Since normal kidneys require merely such stimulation as occurs from the presence of excessive fluid and dissolved waste products in the blood, diuretics are not necessary. They are occasionally useful, but should never be employed except under the direction of a skilled physician.

To protect the kidneys, one should give immediate care to all infections, eat in moderation, avoid excess of condiments or other extremes, drink ample fluids, have a periodic health examination, including a urinalysis, once a year, keep a serene mind, and permit the kidneys to take care of themselves.

<sup>\*</sup> Medical Corps, U. S. N. R., and Associate Clinical Professor of Medicine, New York Postgraduate School of Medicine, Columbia University.

## THE DIETITIAN SAYS CONDUCTED BY LUCILLE J. GOTHAM, DIETITIAN

This department serves as an aid to our readers 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. This service is available only to subscribers.

#### Kidney Stones

"Last week my husband had an attack of kidney stones. He has the best medical care, but I would like to know whether diet has anything to do with the condition."

Research work has shown that an insufficient amount of vitamin A in the diet may be favorable to kidney stone formation. Taking huge amounts of vitamin A may tend to prevent this. Many take fifty thousand or even one hundred thousand units a day. It can be supplied in abundance by eating a large serving of greens or carrots every day and other highly colored foods quite often, such as apricots, sweet potatoes, and tomatoes. There is no proof that the use of certain foods will dissolve kidney stones. It is thought to be a good plan to use soft or distilled water for both cooking and drinking. In literature there are many references to, and experience has shown the value of, citrus fruit juices in relation to the kidneys. Ripe olives contain an oil of benefit to the kidneys.

#### Food Values in Diet

"For some time I have wondered whether my diet is all right, whether it really has everything I need in it. I feel fine, of course, but I would like to be sure, because I know that food does play an important part in life and health. I am an average, moderately active woman. Today I ate the following: For breakfast, I cup tomato juice, ½ cup ready-to-eat whole-grain cereal, 2 tablespoons wheat

germ, 1 cup milk, 1 poached egg, 1 piece whole-wheat toast. Dinner consisted of 1 cup yeast bouillon, 3/4 cup soybeans (dry ones cooked), 3/4 cup green, leafy vegetable salad, 1 cup carrots cooked with chives and little milk for seasoning, 2 potatoes cooked in skins, 1 glass milk. Supper was 1 cup cream of tomato soup, 1 cup fruit salad, 1/4 cup cottage cheese, 2 pieces whole-wheat toast, 1 glass milk. I suppose I use 3 tablespoons of butter on bread and in seasoning. Oh, yes, I ate two big pieces of peanut candy in the evening. I don't usually 'piece,' however."

In May of 1941 leading nutritionists met in Washington, D. D., and after much consideration they drew up a chart of what they would recommend that men, women, and children have each day for optimum health. This committee admits that the recommendations are a little large, but they were called recommendations on purpose rather than requirements, and made a little large as a safeguard. We shall chart your diet and see how it measures up to this most scientific standard. As you examine the accompanying chart you will note, when you compare the food values of what you actually ate with the recommendations, that you were a little short on calories. One more potato would bring your calories up to normal. You had plenty of all the other food essentials, and as you will notice, you had quite a bit extra of some elements. It is really wise to have more of the vitamins and minerals than recommended, as an extra amount of most of

them can be stored away for an emergency.

You will notice that you had a good amount of protein, although you ate no meat. You also had high-quality protein, as the very best is furnished by milk, eggs, and soybeans. One requirement we did not chart and that is vitamin D. It is now recommended that an adult have the amount suggested for infants each day. Some cereals and canned milks are reinforced with vitamin D, and you might be able to provide it by eating these foods. During sunshiny weather you can store vitamin D for dark days if you will spend many hours in the direct sunshine. Where sun bathing or artificial sun baths are not available, reliable concentrates of vitamin D should be taken. Most of the scientific figures in the chart were taken from a very usable book Tables of Food Values, 1942 edition, by Alice V. Bradley, and available from The Manual Arts Press, Peoria, Illinois. The figures for niacin were from several rather recent reports.



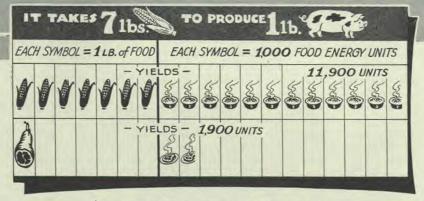
SLENDERNESS is not synonymous with undernutrition. A child of "slender" inheritance may never be fat, but he can be well nourished, with normal muscles and organs and enough adipose tissue to cover his ribs and muscles, though he may require more food and rest to keep him in this condition than the "easy-keeping" child of the same age and activity.—Lydia I. Roberts.

| Average Serving<br>of Food C               | of Or | ood Value<br>ne Day's Meals<br>Gms. of Protein | Gms. of Calcium | Gms. of Iron | I. U. Vit. A | Thiamin<br>Mg. (Vit. B-1) | Ascorbic Acid<br>Mg. (Vit. C)  | Riboflavin<br>Mg. (Vit. B-2) | Mg. (Nico<br>tinic Acid |
|--|-------|--|-----------------|--------------|--------------|---------------------------|--|------------------------------|-------------------------|
| 1 cup tomato juice                         | 55    | 2.4  | .0168           | .00096       | 1,008-8,400  | .14-,27                   | 22-96  | .1018                        | .2                      |
| Shredded Wheat Biscuit                     |       | 2.9  | .0115           | .00127       | 3-4          | .06                       |  | .03                          | 1.2                     |
| tablespoons wheat germ                     | 78    | 5.   | .0142           | .00150       | 60-126       | .48                       |  | .1218                        | .2                      |
| cup milk                                   | 138   | 7.   | .2360           | .00043       | 220-600      | .0819                     | 0-4  | .3657                        | 1.6-5.6                 |
| poached egg                                | 78    | 6.4  | .0290           | .00157       | 500-1,000    | .0718                     | *******  | .1421                        | .0255                   |
| piece whole-wheat toast                    | 61    | 2.4  | .0125           | .00075       | 5.           | .071                      |  | .03                          | .17571                  |
| cup yeast bouillon                         | 15    | 3.   | .0030           | .00300       |              | .03                       |  | .18                          | .9-1                    |
| cup soybeans                               | 176   | 17.6   | .1170           | .00330       | 1,500        | 2.04                      |  | 1.8                          | 2.4-8.3                 |
| cup green, leafy salad                     | 136   | 2.3  | .0312           | .00057       | 530-1,262    | .0206                     | 3-33   | .0309                        | .2                      |
| cup cooked carrots                         | 46    | 1.2  | .0420           | .00062       | 1,400-3,900  | .0408                     | 0-6  | .0616                        | 1                       |
| potatoes in skins                          | 204   | 4.8  | .0312           | .00268       | 72-130       | .14                       | 18-40  | .1018                        | .2                      |
| glass milk                                 | 138   | 7.   | .2360           | .00043       | 220-600      | .0819                     | 0-4  | .3657                        | 1.6-5.6                 |
| cup cream tomato soup                      | 226   | 8.6  | .1604           | .00078       | 582-736      | .0817                     | 10-22  | .0823                        |                         |
| cup fruit salad                            | 292   | 2.6  | .0150           | .00042       | 34-160       | .04                       | 18-30  | .021                         | 1004                    |
| cup cottage cheese                         | 56    | 11.6   | .0492           | 100012       | 20-48        | .01                       |  |                              |                         |
| pieces whole-wheat toast                   |       | 4.8  | .0250           | .00150       | 10           | .142                      | i de la companya de l | .06                          | .35-1.42                |
| glass milk                                 | 138   | 7.   | .2360           | .00043       | 220-600      | .0819                     | 0-4  | .3657                        | 1.6-5.6                 |
| tablespoons butter                         | 306   |  | .0066           | .00009       | 1,470-2,100  | .0013                     |  |                              |                         |
| pieces peanut brittle cane                 |       | 2.4  | .0047           | .00017       | 12-53        | .0611                     | 2010012  | .06                          |                         |
| Process Process of the Control             | 1 00  |  |                 |              | 12-33        | .00-,11                   | Harry .  | -00                          | 1100                    |
| Totals                                     | 2,464 | 99   | 1.27            | 19 Mg.       | 7,866        | 3.57                      | 71   | 3.89                         | 9.                      |
| Recommendation of the<br>National Research |       |  |                 |              |              |                           |  |                              |                         |
| Council                                    | 2,500 | 60   | .8              | 12 Mg.       | 5,000        | 1.5                       | 70   | 2.2                          | 15                      |

### VEGETABLE STEAKS

### BEEFSTEAKS

and Other Meat Products



A DELLA E. REISWIG, Dietitian

PROTEIN is the concern of every nation in the world today because of its vital role in human nutrition. It is the building material of the body. Following prenatal development, through birth, and then childhood, up to the fully developed individual, pro-

teins must be supplied as the chief bodybuilding material. Protein enters into practically every tissue of the body. It is the principal component of all body secretions, especially those containing enzymes, such as the digestive secretions. Adults must have protein for body maintenance. Since, through the activity of living, we are daily exhausting the materials that are of protein origin, a constant intake of protein into the body must be maintained for their adequate restoration.

Protein is a whole platoon of twenty-two soldiers. Some foods contain many, while others contain only a few of the twenty-two. In the process of digestion they are released from their complex formation and become known as amino acids. Each one is now ready to be carried along the blood stream to a broken-down tissue in the body, which must be repaired. If for any reason the amino acid called for is not at his post of duty, oftentimes one soldier can "pinch hit" for another.

But there is one squad of eight or ten amino acids that must be on duty all the time. And there must be enough of them to handle the job on hand, so that normal growth and development or repair is not hindered. Here are the members of this squad: valine, leucine, isoleucine, arginine, lysine, threonine, methionine, phenylalanine, tryptophan, and histidine. Important fellows are they not, even though they do sound a little technical at first? Their job is to build and repair body cells.

A number of foods supply the body with all, or nearly all, these ten amino acids-soybeans, most green leaves, some nuts, garbanzos, wheat germ, corn germ, eggs, milk, and meat. A much larger group of foods contains some of the essential amino acids, but in most cases even these are not present in sufficient amounts to produce normal growth and development. In this group we have grains, peas, fruits, beans (excluding soybeans), lentils, other legumes, and vegetables. It is easy to see by a study of the accompanying chart that a group of foods, each containing different amino acids, can supplement one another, so that the final result is a protein that contains the essential ten. We must also remember that it is equally important to have the proper amounts of each of the ten essential amino acids. Experimental evidence indicates that casein, found in milk, and being one of our most complete proteins, when fed in sufficient quantity accomplished optimal growth in rats, whereas a decreased amount did not vield this result.

Until the present emergency most Americans confined their source of protein largely to meat. Today the shortage of animal protein has compelled many Americans to look about for other sources. Throughout the United States a number of manufacturing plants that had long been established for the purpose of producing vegetable protein foods of high quality have stepped to the foreground. Their products, known as "meat substi-

tutes," or "vegemeats," have been discovered by housewives. The gluten, which is the protein of wheat, is tender and has a truly meatlike texture, with a taste so similar to that of veal (we are told) that the appetite for meat is fully satisfied. The nutmeats made with a nut base,

various portions of soy products, and the gluten of wheat have also become very popular. A wide variety of delightfully new flavors is secured by all who treat themselves to these foods.

Professor Borkholder of Yale University, who has been making a study of possible meat substitutes for the last two years, recommends the following: soybeans, for they rival meat in protein and other food elements; soybean sprouts, for they have several times as much vitamin-B complex as the bean itself and rival tomatoes in vitamin C; the residue of cottonseed oil, for it is exceptionally rich in protein and vitamin Ba; peanuts, for they are a highly concentrated food and contain more protein per pound than sirloin steak plus more carbohydrates than a pound of potatoes plus one third the fat of a pound of butter; "vegetable steaks," for they are fully as rich as beefsteak in protein; yeast, for it is also a rich source of protein and vitamins.

Dr. F. J. Stare and D. M. Hegsted of Harvard recommend the protein of wheat germ and corn germ, because "they are of high biologic value and on the basis of rat growth experiments are the equal of animal proteins such as beef muscle and casein of milk."

Dr. D. Breese Jones of the United States Department of Agriculture, on the basis of rat growth experiments recommends a mixture of 15 parts soy flour and 85 parts whole-wheat flour, since it is considerably

(Continued on page 31)

N all sides are laws to protect us from adulterated drugs, foods, and cosmetics, from fraudulent claims and practices, and from persecution by criminals. But we have no laws to protect our children from becoming criminals because of their parents' actions; such prevention can be accomplished only by careful and wise guidance by the parent. assisted by the teacher. Every parent who is deserving of children desires a child who will bring happiness into the home and who later will become an asset to his community and country. The value of a happy home is evident to all who have experienced one. The need for useful contributions to community life is apparent to all who are watching the present world conflict and who have seen the atrocities committed by some nations in battle. The crimes committed by such can be traced to their leaders. In the words of Emerson: "The true test of civilization is not the census, nor the size of cities, nor the crops-no, but the kind of man the country turns out."

The attitude which your child assumes, his actions, and his choice of friends will ultimately cause him to be classed as a friend or foe of his family, community, and country, and of society in general. Where is formed the basis for such an issue? In

end result? A happy home and family, or a household separated by misunderstanding and perhaps delinquency.

The annual report from the Chicago juvenile court recently declared the delinquency among girls between the ages of twelve and eighteen to be increased by almost 100 per cent in two years. A judge who has had years of experience commented on these figures in part: "The causes can be found in the home situations characterized by disruption of family life and a consequent breakdown of parental control. Parents should look after their children."

This delinquency is not confined to Chicago or the United States.

An authority in the field of education who visited England early last autumn declared that one of this country's main domestic problems arising from

war is that of juvenile delinquency. Boys and girls leave school at the age of fourteen or fifteen years, earn money, and if not properly guided, disorganize family life. The English authorities have attempted to cope with the situation by providing recreational facilities, the object being to keep the children off the streets and occupied pleasantly. It is obvious, however, that such action does not

> provide the best answer, as it does not strike at the

Undoubtedly some have seen the recent newspaper publicity given to a young couple, each suing for divorce. The father accused the mother of giving their three-year-old son cigarettes "to keep him quiet while she reads in bed." The mother accused the father of giving



A AUSTIN

#### An Article Every Mothe

beer to the boy. What kind of man would this three-year-old boy grow into if he should remain in such a home?

Each family, each member of the family, each community, faces a continual struggle for existence and recognition. It must meet its social, food, financial, and other problems or it disappears. It must conform to the standards adopted at the moment by society or it becomes an outcast. To overcome these problems man calls continually upon his own resources and, when possible, those of his family and neighbors, and even the entire plant and animal kingdom. Experience permits him to choose the best course of action, but until he gains this experience he must depend largely upon the help offered by others. Where else should he expect to get the best guidance than from his own family and teachers?

Young children are especially prone to imitate their playmates' and elders' actions, even outbursts of temper, fears, food habits, bad manners, uncleanliness, and poor choice of English. Once these imitations become habits they are firmly established and require much effort to correct. Thus, the most obvious and the most important thing for parents and teachers to remember is the value of setting a good example.

The next-ranking consideration is the ease with which almost everyone can be led and the resistance offered when he is driven, or in popular terms is "pushed around." Every human being instinctively resents disturbing pressure but usually accepts wise leadership, in fact, welcomes it. Children are no exception. In a young child resentment rises as quickly against a parent and a close playmate as against a total stranger. It will turn him from a friend into a foe; it may last a short time and quickly be forgotten, or persist for an indefinite period. The longer the resentment exists, the more fixed it and the resultant behavior

\* Secretary, Council on Pharmacy and Chemistry, American Medical Association.



## Child OR FOE?

SMITH, M. D.\*

#### and Father Should Read

become. Continual nagging or physical punishment will not improve the situation, except perhaps on the surface, but careful and firm leadership will correct the trouble with no undesirable vestiges remaining.

How does one go about providing guidance? This question is frequently asked and receives varying answers. However, certain basic principles have been established which may be applied readily by all who have a desire to get their children off to a good start in life, mentally and, indirectly, physically. Mental health and physical health are closely related, and one is affected quickly and appreciably by a disturbance in the other. Even emotional disturbances are reflected in the physical well-being, and physical defects may seriously impair mental stability in the child if proper steps are not taken to explain them and provide some reassuring words and, frequently, diversions.

The problem of proper guidance and companionship is not one about which typed answers can be offered to suit the questions of all children and parents. The child has certain rights, as have his mother and father. These encompass more than such questions as the following: How late may one stay up at night? How much weekly allowance should be provided? Is listening to the radio after retiring advisable? Should adequate meals be eaten? Should a child or adolescent have odd jobs to do around the house? These particular questions may be answered with a simple yes or no; others need much thought and explanation. Most children learn, without too much difficulty, that to acquire certain rights, they must be prepared to undertake some duties and responsibilities. This learning applies equally well to the parent and teacher, because in the eyes of society they agreed to undertake certain duties and forgo some privileges when they became parents and teachers.

A recent newspaper article intended for the high-school student reminded both student and parent that youth is experienced only once in a lifetime. While it frequently is not all that one hopes for, it can be made a happier time if the parent will even occasionally relax from worrying about the rent, taxes, and increased cost of living, and offer an attentive ear to his offspring's talk about clothing, dates, friends, and other things which form a large part of every boy's and girl's everyday life. Things have changed greatly since mother and father's day. It is the parents' duty to listen to their child or adolescent, and at the same time they may learn something about modern life! It is also the child's duty to heed his par-

ents' remarks. This will help him recognize that there may be certain obstacles which are absolutely insurmountable by the parents; in which case it is best to make the most of that

which is available.

Such free discussion will help the parents to realize that, after all, their children are individuals, have opinions of their own, and can make decisions which are to their credit. Sometimes it is surprising to see how much can be accom-

plished by a careful re-evaluation of a situation. It is decidedly important, however, for the parents and their children to learn early in life that each has certain obligations to the other, and neither party should be looked upon as the unquestioning servant.

One of the first thoughts to enter the parents' minds when they are confronted with a problem affecting parent-child relationships is, "What should I do?" Perhaps it would be better to ask at times, "What should I not do?" The first thing to consider is whether the problem is sufficiently important to be concerned about. Then, what was the cause? Who was to blame-the parent, the child, or some outsider? Finally, what should be done to

correct the situation and, if possible, to prevent its recurrence?

The questions and answers will vary with the family and with the physical and mental characteristics of its members. Those who have disabilities-even the simple eye troubles that may require eyeglasses-frequently live in worlds of their own. This world should be entered gently by the intruder and not shattered with one devastating blow. In so entering, the parent or teacher should be especially careful to avoid drawing attention to any physical disfigurement. Children are very sensitive and are easily hurt. Furthermore, they are much more discerning than is believed by the average adult, and their emotions may be in a more turbulent state than is indicated by their ac-

The Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association has issued a report on mental hygiene in the classroom. This report, a 70-page booklet, poses problems and questions, discussions and answers. The booklet is of value to more than the teacher, as most of the contents can be



## THE HOUSEWIFE'S CONDUCTED BY CONDUCTED BY CAROLINE EELLS KEELER.

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

#### April Again

What is so lovely as a day in April? Days that are rain washed and flower scented, with dawns of silvery mist and symphonies of birds. New life is surging everywhere, and you, too, feel a new urge to be up and doing. If only we could keep April forever in our hearts, we would stay young and hopeful and refreshing. It's something to strive for, isn't it? April is like keeping faith with life, not getting soured with routine. April, you know, is a bit of mother nature's routine, and how beautiful she has made it.

#### Window Sill Parsley Garden

THE Ruby Products Company sent me a Ruby Window Sill Parsley Garden, and we have been watching the little seeds germinate and grow. We are anticipating some parsley from it one of these days. This garden comes in a cardboard container which is really a scientifically preplanted seed flat. All the housewife has to do is to keep the contents moist. The little container is attractive and is pleasing to look at on the window sill. I keep mine on the sill above the kitchen sink. This little garden sells for 25 cents in the stores. If you wish to order one by mail, add ten cents for handling, and send to Ruby Products Company, 345 N. Water Street, Milwaukee 2, Wisconsin.

#### Glass Utensils

Now that more and more we are having to use glass utensils in place of aluminum, copper, and steel, we want to know how to take care of them. I, for one, have had the sad experience of seeing them crack in the oven. The following counsel on the care of glassware for baking comes from the Extension Service of the University of Illinois, College of Agriculture:

"Read the label on glass utensils and be sure they are tempered to stand the heat to which you plan to subject them. Some of them are heatproof only and intended for use in the oven; others are flameproof and can be used right on top of the stove—directly over a burner. However, neither type should be subjected to heat when empty. A little liquid or fat or moist food should be added before the utensil is bested

"One important rule to observe in using all glass cooking ware is to avoid sudden changes of temperature. If the ingredients for the dish you are making come right out of the refrigerator, use a cold glass baking dish or saucepan. On the other hand, if you are preparing a scalloped or creamed dish and are using a hot sauce, warm the dish by filling it with hot water and letting it stand a few minutes before you put the hot ingredients into it.

"Be cautious, too, when you remove a glass utensil from the oven or from the top of the range. Don't set it down on a cold porcelain or marble table top or slab unless you protect it by several thicknesses of cloth. Cold drafts are equally dangerous and should be avoided in order to prevent breakage.

"Keep temperature in mind, too, when you wash glass cooking ware. Let it cool thoroughly before you wash it, and then use the regular procedure for other types of utensils, being careful not to subject it to extreme heat or cold."

#### Take Care of Your Cutlery

CUTLERY is especially precious now and needs special care. Here are some rules for making it last. Wash it separately, holding the piece under the faucet, dull edge up; use warm water. This rule, perhaps, calls for a don't. You have seen people do it, but don't you do it-that is, drop all your cutlery into a pan with other utensils. You may dull the cutting edges, perhaps injure the handles. sharpen a knife by rubbing it against a brick or stone or another knife; use a proper sharpening instrument to resharpen knives that have thin blades. And if you don't wash your cutlery with other things in a pan, you surely don't put them away in a drawer just any hitand-miss way. The best and most convenient way to take care of kitchen knives is to have a knife board hanging on the wall, with a separate place for each instrument.

#### Rusks

Sometimes you get tired of eating bread you buy, and want to dabble with rolls or homemade bread. Here is a recipe for rusks, those delicious, crunchy pieces of slightly sweetened bread.

> 1 package fast granular yeast 14 cup lukewarm water 114 teaspoons sugar 1 egg

1 cup flour 1/4 teaspoon salt

Pour the granular yeast into the ¼ cup lukewarm water and add ¼ teaspoon sugar. Beat the egg well and mix with the flour, salt, and remaining sugar, blending well. Add the softened yeast and mix thoroughly. Set to rise in warm place until double in bulk. Roll out on floured board to a scant ¾ inch in thickness. Place on buttered pan and bake in hot oven about 15 minutes or until light brown in color. When cold, cut in narrow strips and serve plain, or frost with any plain white icing.

#### Country Supper

Here's a new dish to try some night.

#### Cottage Cheese Triangles

2 tablespoons Nucoa

2 egg yolks

I pound cottage cheese

2 cups sifted enriched flour

3 tablespoons chopped parsley

2 teaspoons salt

2 egg whites, stiffly beaten Country tomato sauce

Cream Nucoa and egg yolks together. Add cheese, flour, parsley, and salt, and mix well. Fold in egg whites. Roll on lightly floured board. Cut in strips or fancy shapes. Drop in boiling salted water and cook 6 minutes. Remove with a strainerlike spoon. Serve with country tomato sauce. Yield, 6 servings.

#### Country Tomato Sauce

2 tablespoons Nucoa

1/2 pound chopped meat substitute

11/2 teaspoons salt

1 large onion, sliced

3 tablespoons dried or fresh parsley

3 tablespoons dried or fresh celery leaves

2 large peeled tomatoes, cut in pieces or 2 cups canned tomato pulp

1 cup water

2 tablespoons enriched flour

Mix meat substitute with ½ teaspoon salt and shape into small balls. Brown balls and sliced onion in Nucoa over low heat. Add parsley, celery leaves, tomatoes, water, 1 teaspoon salt; cover, and simmer 20 minutes. Mix flour with a little cold water to make a paste. Add to sauce, stir, and cook until thickened.

#### Service

When my mother suffered a stroke of paralysis, Anna Kerns, one of our neighbors, didn't say, "Now, if there's anything at all I can do . . ." She said, "Mary, I'll be there at seven-thirty in the morning to do the washing for you." And she was, too.—Ernie Pyle in Good Neighbors, The Woman, January, 1944.

Blessed be the volunteers; many a load they lift, and many a day make brighter.



## FOUR MORE RECOGNIZED AIDS to "HAPPIER MEALS"

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You who have discovered the benefits of instant broth will be doubly pleased with the extra-rich, meatlike appeal of Beta Broth. This wholesome blend of vitamin-rich Brewers' Yeast extract, pure vegetable ingredients and natural salts instantly becomes a clear, appetizing health drink when mixed with boiling water-a teaspoonful to a cup. It helps wake up lazy appetites, puts new zest in eating, helps tone up the whole digestive tract by encouraging normal flow of natural gastric juices. . . . It's an ideal appetizer. . . . Children relish it with their lunches. Many find a cupful at bedtime promotes sound, restful sleep. Its low caloric content makes it excellent for those on special diets. Its economy will please you too! Ask for Beta Broth today!

### TASTEX (Concentrate)

You'll find a new taste-thrill for meatless dishes in Tastex! It perks up meat-free soups, stews, gravies, bouillons, and sandwich spreads with all the savory flavor of real meatyet Tastex contains neither meat nor meat extract! It's a pure, wholesome yeast product supplemented with pure vegetable extract, Ideal for pure vegetable extract, Ideal for those on special diets because it contains no sugar or starch, no animal or vegetable fat. Tastex is blended into a smooth, ready-mixed paste for quick, easy use. A little goes a long way—one-half teaspoonful adds full, meat-like richness to a bowl of soup, or makes a cupful of invigorating broth! Tastex contains the important B-complex vitamins, too! Try the wonderfully improved meatless meatflavor of genuine Tastex today. Be sure to ask your dealer for Tastex next time you visit his store. Available in several convenient sizes, including a large, 18-ounce economy jar.



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FOODS

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#### Craving for Drink

"My husband has a thirst for drink. Please send a diet that will help destroy this unnatural craving."

We do not have a diet that can be regarded as curative of alcoholic craving. The interest of the individual must be aroused in matters of this kind. Frequently the use of fruit juices satisfies the longing for something out of the ordinary in the way of drink. We know of cases in which the craving for liquor has been reduced by using fruit juices in quite liberal portions. Often the nervous state and conditions under which one lives are to be considered in problems of this type.

#### Beer

"What makes beer a harmful drink?"

Beer, as commonly offered for sale

at the present time, contains about 4 per cent alcohol. Many persons, on drinking one or several glasses, become more or less intoxicated with this amount of alcohol. There is a certain amount of vitamin B in beer, but not a sufficient amount to offset fully the effect of the continued use of alcohol.

Alcohol always carries with it a danger, and the fact that some persons are more susceptible to it than others should lead one to be very suspicious of using any drink containing alcohol, especially in these days of rapid travel. I think the experience of most people who use beer is that it is habit forming.

Another consideration against beer which is often overlooked is that it is wasteful of valuable grains which would do a great deal more in feeding the nation if they were served as food.

#### Eczema on Hands

"I have eczema on my hands. The skin on the palms is cracked, scaly, and sore. It is beginning to spread to the outer skin now. I have been using some ointment from a doctor, but it doesn't seem to help. I will appreciate any advice."

Lesions of the skin appearing on the palm of the hand should be very carefully studied before a diagnosis is fully settled upon. At the present time we see so much athlete's foot in one form or another that this should be very diligently ruled out before a final diagnosis of eczema is made.

The treatment of the two conditions would be quite different. If your ailment

is truly an eczema, you should test somewhat the benefit resulting from changes in the diet. Omit for a period of time, for example, everything made with milk. If no benefit follows, omit everything made with eggs, and if then you are not helped by the change, restore the former articles and omit everything made with wheat. Sometimes in this way the offending article of food can be isolated. Of course, eczema may arise from other sources than food. If you are using an irritating soap in washing, or are handling cloth with certain dyes in it, or if your hands are constantly damp, eczema may result. You may find prompt relief by eliminating these sources of irritation. If the eczema is moist, an astringent lotion with a drying tendency should be used, such as calamine lotion, to which various other medicaments may be added if one desires.

#### Rickets

"I am taking care of a little five-year-old boy who has rickets and is very thin. He has had a cough for a long time and a cold most of the time, but the doctors say he doesn't have tuberculosis. He gets codliver oil every day. What foods would best build him up?"

A child having rickets should by all means be given a generous portion of cod-liver oil regularly. In addition to this, if you can possibly arrange it, get him out into the open, even if it is for only a few minutes every day. Preferably he should be in the sunshine when it is obtainable. I realize that during the winter months there is a serious lack of sunshine in your town, but you may be able to plan so that he will have the benefit of what you have.

Milk should be provided in his dietary in generous portions. The calcium and phosphorus found in it are highly important in offsetting the injuries brought about through rickets. Vegetables should be included freely, too. However, where cod-liver oil and vitamins, along with the calcium of milk, are provided, we would suggest that the diet be quite general, planned to build up his strength and weight and vigor in every respect. The cough should disappear as he improves. Exposure to ultraviolet light or the mercury-vapor lamp would be helpful. This, in part, would fill the place of actual sunshing.

#### "Thick Blood"

"My husband has a numb feeling in his fingers and legs and feet. The doctor says his blood is thick. Is there anything he can eat to help that? He is fifty-six years of age."

The statement that your husband's blood is thick should be taken as only a relative remark. So far as we know, a finding of this kind does not explain the symptoms you describe; in fact, we doubt whether the blood can be demonstrated to be thicker on one occasion than another, except in a trivial degree. We would incline more to the view that the discomfort he experiences is due to changes in the blood vessel walls, which narrow their capacity and lessen the amount of blood circulating through the tissue. Plunging the extremities into alternate hot and cold water often helps in conditions of this The feet should be put into a vessel of hot water as warm as can be comfortably borne for three to five minutes, then plunged into cold water for a few seconds, and back again into the warm water. Sometimes there is an advantage in allowing the legs to hang over the side of the bed and then raising them well above the bed. This will let the blood flow into them and flow out again, helping the circulation.

#### Leukemia

"Please tell me the cause of leukemia."

Leukemia is a disease in which there is an increase in the number of white cells present. You probably are aware that when one is fighting an infection, there is a physiological increase of the white cells which is temporary and acts as a protective mechanism; but when the white cells appear in large numbers far beyond the number that will offer protection against infection, or when the types of white cells are unusual, we have a condition that is spoken of as leukemia, or white blood.

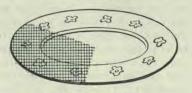
The cause is not known. Poisoning with certain of the coal-tar dyes seems to dispose to certain forms of this disease, but the more common forms are of unknown origin. Sometimes it is associated with an enlargement of the spleen, and by suitable treatment of this organ by deep X-ray therapy, one can live very comfortably without the distressing symptoms, and the count be kept near to normal.

(Continued on page 34)

## Three "thirds" show why cereal foods carry their weight nutritionally

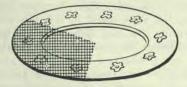
#### OF THE FOODS AMERICANS EAT,\* CEREAL FOODS CONTRIBUTE

almost a third (28-30%) of the



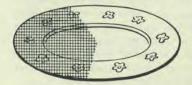
FOOD-ENERGY (calories)

almost a third (28-30%) of the



**PROTEIN** 

over a third\* of three essential



**B VITAMINS AND IRON** 

\*Based on 2800 calorie prewar diet, and on assumption cereal consumption consisted wholly of enriched flour and bread and whole-grain or restored cereals. Current enrichment levels used. All data adjusted for losses in cooking. \*40% of the Thiamine, 45% of the Niacin, 38.5% of the Riboflavin, 45-46% of the Iron (as recommended for a 2800 calorie diet).

THE CEREAL FOODS (including flour, bread and breakfast cereals) are conceded to be the most economical of our major foodstuffs in the contribution of food-energy. Their contribution of protein is likewise important. Now, thanks to flour enrichment and cereal restoration, they also carry more than their share of three B vitamins and iron.

The simplest way to grasp, fully, the nutritional significance of cereal foods, insofar as our national dietary is concerned, is to carry a mental image of the three "thirds" pictured above.

Flour and bread enrichment, and cereal restoration, are steps of truly major importance toward the improvement of our national diet. Many nutritionists hold the view that if the consumption of cereals were confined to those of enriched, restored and whole grain types, their consumption could be materially increased without impairing the attractiveness and acceptability of our diet... and without impairing it nutritionally.

In their view such an increase could mean an actual nutritional gain—if coupled with a lessened consumption of non-protective foods. Increased consumption of "protective" foods is of course a highly desirable goal. From that standpoint it is true that an increased consumption of cereal products of the enriched, whole-grain and restored types can contribute toward better nutrition in a material way.

The newer knowledge of nutrition has received one of its most practical applications in the developments that have made enriched flour and bread and restored breakfast cereals widely available.

#### GENERAL MILLS, Inc.

MINNEAPOLIS, MINNESOTA











Our family flours are all enriched to the new, higher gov't standards, including Drifted Snow "Home-Perfected" Flour (in the West) and Red Band Flour (in the South). Bisquick contains enriched flour. Also, all our ready-to-eat cereals are restored to whole grain levels. All the brands above are registered trade marks of General Mills, Inc.

## The MOTHER'S COUNSELOR CONDUCTED BY CONDUCTED BY CONDUCTED BY CONDUCTED BY CONDUCTED BY CONDUCTED BY

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.

#### A Three-Year-Old Who Bumps Her Head

"I should like your advice on a problem concerning my three-year-old daughter. Since she was old enough to sit up, she has had a habit of bumping her head. This may not sound important to you, but I am very much afraid of the effect it may have on her as she grows.

"While she was still sleeping in a crib, she would bump so hard that the crib would move ten and twelve inches from the wall. Now she is sleeping in the lower bunk of a bunk bed and she moves it three and four inches. If she sits in a heavy overstuffed chair and bumps, she raises the front almost two inches off the floor. I am telling you these things to give you an idea of how hard she hits her head.

"I have taken her to three doctors, one a specialist, and they all say that it is just a nervous habit and there is no danger of her hurting herself. She is a healthy, active child in every other way. Her weight is thirty-seven pounds, and she has a very good appetite. Her diet includes eggs, milk, cereals, vegetables, fruit, and I give her yeast tablets and cod-liver oil every day.

"She is a very high-strung child and possibly a little spoiled. She has no playmates of her own age except her brother, who is four and a half years old. He tries to play with her, but she screams and bumps her head if things do not go her way.

"I have tried several ways to overcome this habit—whipping, scolding, putting a harness on her so that she cannot reach the top of the bed (this was a doctor's suggestion)—but then she would bump on the side of the bed.

"So you see, I really need advice."

Now is the time to break your child of this emotional habit. She does it partly because she is displeased and partly because she is interested in the way you react to it.

In the first place, show no anxiety or distress in regard to it; act very unconcerned as far as your facial expression goes. But every time she bumps her head spank her promptly and severely—not in anger or concern, but just as surely as effect follows cause. Keep this up for a few days without missing a single time, and she will begin to lose her interest in

an act that causes no attention except some sharp discomfort to herself.

My youngest children are twins, now fifteen years old. They bumped their heads, but were cured in this way after everything else had failed. It all happened before they can remember; so they have no recollection of it. It is when children are very young that such punishment, if necessary, is effective and worth

#### A Frightened Little Girl

"My little four-and-one-half-year-old girl is afraid to be alone or even to stay with her thirteen-month-old sister. For instance, whenever I tell her I am going up to the attic to hang up clothes, she gets quite excited and asks me whether I am coming back. I have tried asking her what she thinks, and have said, 'Don't I always come back?' If I go out for some wood, as soon as she hears the door slam she comes running and screaming, 'Mother, where are you? Are you coming back?'

"I thought for a while that she was just putting on; but I found out, by hiding in the house, that her terror was very real. She ran wildly from room to room, screaming, and when I came out of hiding she was pale and her heart was beating very hard.

"She gets panicky over nothing and cries easily. Not long ago her daddy set a chair over her. It did not even touch her, but she became very much frightened and screamed, 'Let me out-let me out!'

"She is not afraid of people, and will stay with anyone whom she has seen a few times. However, I have never left her with anyone but her grandparents or an aunt for any length of time."

I think the best way to handle your problem with the little daughter is not to argue with her about it or tell her that she shouldn't be afraid. Just take it for granted that she is afraid and be very gentle with her. Whenever you leave the room, let her go with you. Say, "Let's go upstairs," etc. Or, "Mother is going outdoors; do you want to come along?" If you happen to leave her and she is frightened, just call back soothingly, "I'll be right back, dear." Put your arms around her upon your return and say quietly to her, "Mother would never leave her little girl."

Try to keep her with you and thus avoid the paroxysms of fright that so upset her little nervous system. As time goes on and her nervous system gets stronger, she will be less likely to be so frightened. Perhaps she has heard stories told by older people, unconscious of her presence, that have stirred her imagination and laid the background for her emotional instability. Perhaps she has had some experience of being left alone that has given her an emotional fixation. At any rate, make as little of it as possible and avoid the occasion for her fright. After all, to be with mother is the little child's sweetest experience.

#### Biting Nails

"I have a little girl of eighteen months who has a habit of biting her nails. To break her of this habit, I have tried several ways, such as putting salt or nail polish on her nails. The latter idea worked for a few days, but now she is biting them again. This has made me very nervous, because I am afraid I shall not be able to break her of this habit."

The more nervous you get, the more your little girl will bite her nails. Your nervousness is transmitted to her. The important thing is for you to stop worrying. Always be happy, relaxed, and serene in her presence. She might better bite her fingernails than to develop the nervousness that you will give her by your worrying.

She evidently is a nervous child anyway. I would suggest that she have the contents of a vitamin-B complex capsule and a panteric capsule (Parke Davis and Company) in her food three times a day.

For a week or two pay no attention to her fingernail biting. Then see if you can get at the drugstore a solution called "Quit It," and apply this to her nails without her knowing why you are doing it, perhaps at the time of washing her hands. Then when she screws up her little face at the bitter taste, laugh about it and act as if it were a good joke. If you cannot get the "Quit It," your druggist can give you a solution of quinine or aloes, or perhaps something else that will do as well.

But above all things, be happy and gay around your little girl. Happiness and gaiety are contagious, and markedly neutralize nervousness.

#### Eat Right

(Continued from page 13)

saying applies. A diet consisting largely of meats (fish and fowl included) and cereal grains and breadstuffs is a one-sided diet, and is greatly lacking in certain necessary vitamins. Refined flour products and refined cereals, except as they are enriched, have only made such a diet still more inadequate in vitamins and minerals.

Experimental research regarding the causes and prevention of the common cold by Spiesman and Arnold, of the University of Illinois and the Chicago Health Department, caused them to conclude that diet is the largest factor and simple water treatments (hydrotherapy) next most important in prevention, but that both together give the highest degree of freedom from colds. In 1942 it was reported that for the single week ending February 25 there were 23,000,-000 people in the United States with colds. Some years previously careful surveys in seventeen States and some provinces of Canada showed that about 50 per cent of acute illness consists of acute respiratory infections, such as colds, influenza, and pneumonia.

We have little to fear healthwise from food rationing, unless it tends to restrict the use of these protective foods—fruits, vegetables, milk, and milk products. Victory gardens, the orchard, berry patch, and the dairy provide just those foods which are most needed to build vigorous man power with the greatest endurance

and freedom from illness.

For those who wish to serve their country best, build the strongest bodies, and call least upon doctors and nurses, we would say, Follow Sherman's conclusions regarding improvement in the American diet-and his example. If the people were allowed to do it, America would gain much in vigorous man power and health by permitting the use of "red" stamps in purchasing canned, frozen, and dried fruits and vegetables instead of so much meat and other high protein foods. For the growing season of the year, this may not be so important, as fresh products are available, but for three fourths, or at least two thirds, of the year certain fresh products are not so easily available.

Here are the conclusions given by H. C. Sherman:

"Vegetables and fruit, taken as a group, may be ranked next after grain products and milk in importance as constituents of an economical and well-balanced diet. They tend to correct both the mineral and the vitamin deficiencies of the grain products, and in a sense they supplement the milk also, in that many of the vegetables and fruits are rich in iron or vitamin C or both.

"When the 224 dietaries already referred to were grouped according to the prominence of fruit and vegetables in



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them, it was found that as vegetables and fruit became more prominent, there was increase in the energy, phosphorus, calcium, and iron values (and, we may infer, in the vitamin A, C, and G values also) of the diet, while the protein remained practically unchanged. Thus, increasing the use of vegetables and fruit seems to improve the food value of the diet at every point at which the American dietary is likely to need improvement.

"The dietaries in which milk, vegetables, and fruit (together) were prominent averaged lower in cost and higher in energy, protein, phosphorus, calcium, and iron; and undoubtedly they also had higher vitamin A, C, and G values.

"Such investigations of the data of actual food consumption, viewed in the light of the findings of recent nutritional research, make it clear that the average, or typical, American food budget can be improved by giving greater prominence to milk, vegetables, and fruit, the money needed for this being obtained if necessary by reducing the expenditures for meats and sweets."



Do not neglect the season's best spring tonic—frequent use of the spade and rake. —Georgia's Health.



By Veda S. Marsh, R. N.

#### Why Are Ears Curly?

OHN, how do you get your ears so dirty?" asked Mother Monroe one spring evening as they were sitting out on the porch. "Be sure to give them an extra good scrubbing when you take your bath tonight."

"Why do ears have to be so curly and have so many creases that are always getting full of dirt?"

"I'll show you," said Mother. "Please

bring me that cardboard."

When John brought the cardboard she asked him to step back about twelve feet. She held the cardboard in front of her lips so John could not see her lips move. Very softly she said, "How many ears do you have?"

John burst out laughing as he said, "Why, two."

"Now please turn around with your back toward me," said Mother.

John turned around. Mother still held the cardboard in front of her mouth, and speaking just as loudly as before, she said, "When did you wash your ears last?"

But John could not hear what she said; so he turned around as she repeated it.

"Oh, I understand now," said John. "But are you sure you talked as loudly as you did before?"

"Yes, she did," said Joan. "Mother, try it out with me now.'

John sat on the steps and watched Mother test out Joan with the same results. He could see then that the outer ear helps one to hear.

"You remember what happens when you drop a pebble in the fish pond," said Mother.

"It scares the fish," said John,

"Yes, sometimes it does. But what does it do to the water itself?"

"It starts ripples that spread until they reach the shore."

"Yes, that is correct. When air is forced through the vocal cords, we can make different sounds which we call speech. This forcing of the air, with the cords at different degrees of tension, produces waves in the air very similar to the waves in water. Your outer ear catches these sound waves and directs them down the opening into the ear.

"Down this small opening, beyond where you can see from the outside, is a membrane stretched tightly across the opening, similar to the head of a drum. In fact, we call it the eardrum.

"When you beat a drum, the pressure of the mallet on the drumhead compresses the air inside the drum and causes vibrations of the drumhead which produce the sound.

"Inside your eardrum is what we call the middle ear. On one side of the middle ear is the eardrum. On the other side are two openings into the inner ear which are covered with thin membrane. Between the eardrum and these membranes are three tiny bones fastened together. They move together very easily. The air waves striking the drum vibrate these bones, and they in turn vibrate the other membranes leading to the inner ear. The inner ear is filled with a liquid, and the vibrations produce tiny waves in this

"Also in the inner ear are some delicate nerves that carry the sensations from these many vibrations to the brain, where we interpret them as different sounds.

"If the eardrum becomes ruptured or broken, one may lose his hearing and become deaf. Once I knew two boys who were wrestling and then they started to fight. One slapped the other on the ear and broke the eardrum. He was deaf in that ear for the rest of his life.

"In college one day a girl in the dormitory rolled onto a bobby pin while she was sleeping, and it punctured her eardrum. She became deaf in that ear. Some children and even some grown people use pins and bobby pins and tiny hairpins to dig down into the ear. This is a dangerous thing to do. Let a doctor do any ear digging that needs to be done.

"There is a tube leading from the middle ear downward to the throat. This is called the Eustachian tube. When a person has a cold, so that there are many, many germs in the throat, one must be careful not to blow them up into the middle ear, and so cause an infection there. It is a good plan in blowing the nose to blow one side at a time, and always keep the mouth open slightly whenever blowing the nose. That will help to prevent blowing the germs up into the middle ear. When they do get into the middle ear they multiply quickly and give a person an earache. Then the pus may form so rapidly that it breaks the eardrum and thus produces deafness. If the ear aches, one should always go to a doctor to have it examined. He can tell

whether the eardrum is bulging and whether there is danger of its breaking. With a very tiny point of a special knife he can open the drum and let the pus out. It will then heal without injuring the eardrum and without injuring the hear-

"It would be dreadful to have to go through life deaf, and yet many people are deaf just because of carelessness."

"We are to have special reports in physiology class. I believe I shall report on the ear," said John. "I think it is very interesting, and I think everyone should know these things."

#### Suggestions for Teachers

1. Show a diagram, or chart, of the ear and explain the different parts.

2. Carry on experiments

a. Whisper something when the mouth is covered so the pupils cannot see the lips move.

b. Have each child turn around and try

out the same thing.
Try it out while the child holds back his ear flat against his head. Note difference in hearing.

d. Bend ear forward and note difference. Why does a deaf person often push the outer ear forward?

3. The bones are a good conductor of sounds. Put a thin watch between the teeth and notice the loud sound.

List ways in which people have injured the ears and produced deafness.

Have children try to do lip reading. This will interest them in how different sounds are made, and will lead to discussion on phonetics.

Try pitching the voice high and low, and note which is the more pleasing type of

7. List ways to take good care of the ears.

Take a large piece of newspaper and have two children hold all four corners so paper is tight, poke your finger through the middle of the paper quickly. That is the type of ragged tear that may come to the eardrum if it is allowed to break with a blow on the ear, or during an earache when there is infection in the middle ear. Now have the paper held as before and puncture it with a small sharp knife. Notice difference in holes made. The latter type will heal and not injure the drum; the former type is liable to cause deafness.

#### Rules for Nutrition Club

#### Rules for the School Year 1943-44

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 or dried), whole-wheat or dark bread, and nothing between

whole-wheat of dark of doors six days a week, meals.

6. I play or work out of doors six days a week, when weather permits.

7. I try to be courteous and cheerful at all times, and do one good deed for someone each day.

I have read the rules of the Junior Life and Health League, and have been observing them for two weeks. I shall continue to observe them, and will read the Boys and Girls' page each month. Please enroll me as a member of the Junior Life and Health League for the school year 1943-44. I understand I am to receive a beautifully engraved membership card.

#### Directions

Copy the above pledge in your own handwriting and sign your name (very plainly). 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.

### SOYALAC



★ A time-tested and medically approved nonallergic infant food.

Miller's Spray-Dried Soyalac is a soluble soya milk modified and reinforced with proper proportions of essential oils, carbohydrates, minerals, and all required vitamins except vitamin C.

hile Soyalac is the distinctive and only soluble spray-dried, completely modified vegetable milk offered to replace either mother's or cow's milk, and intended for babies and children of early years, other types of spray-dried soya milk are available for general family use. All these contain the equivalent of cow's milk in food value and calcium.

- ★ Miller's Soya-Malt. A malted soya milk mostly used as a beverage milk.
- ★ Miller's Chocolate Soya-Malt. Also a tasty beverage milk.
- ★ Miller's All-Purpose Soyalac. A natural soya milk for both beverage and cooking purposes.

Packed in 1-lb., 4-lb., and 20-lb. containers. Priced on a level with cow's milk. If your druggist or health food store does not have

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A manual on Soya Milk Intant
Feeding is obtainable from the
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druggist or health food store does not have Miller's Soyalac Infant Food, packed in 1-lb. glass jars, or other brands of Miller's Soya Milk, write to Box 388.

- 1 Ready preparation.
- 2 Easy digestion.
- 3 High protein availability.
- 4 A complete infant food requiring only the addition to the diet of vitamin C in form of orange or tomato juice.

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Distinctive

- 5 Nonallergic; thus it can be substituted for cow's milk for children with eczema, regurgitation, dyspepsia, etc.
- 6 Nonconstipating.
- **7** Costs no more for baby's diet than prepared baby foods from animal milks.
- 8 Soya protein most readily assimilated. Since protein is the growing portion of the baby's diet, it is important that the child has the maximum intake it can utilize.

INTERNATIONAL NUTRITION LABORATORY / MT. VERNON, OHIO



By Amy Klose, R. N.

EETH are those things that ache me," said the small boy in defining teeth. Very few people have escaped experiencing the distress of a toothache. We know that many toothaches could be prevented if we brushed our teeth regularly twice a day and visited our dentist twice a year, so that he could repair any tiny cavities before they had a chance to get big enough to hurt. The proper diet, containing sufficient quantities of vitamins A, C, and D, together with calcium and phosphorus, will form sound teeth and go far to prevent the decay that causes the ache.

If the tooth aches during the day, go and see your dentist then; but if it aches at night, try to relieve it by using either an ice bag or a hot-water bottle on it. Sometimes heat gives relief and sometimes only cold is effective. A toothache associated with a tender tooth that feels too long, and is relieved by a cold application, means an abscessed tooth. Painting around such a tooth with iodine helps at times until you can see a

If there is a cavity in the tooth clean it out with a small piece of cotton. Saturate another small piece of cotton with oil of cloves and pack gently into the cavity. This will

probably give relief for a time.

Earache is usually due to an infection which travels up the Eustachian tube from the nose to the middle ear. It is not often due to the infection entering through the external ear canal. The drum membrane shuts off the outer ear from the middle ear, and unless this is ruptured the infection cannot

get in by way of the drum.

The child should be taught early how to blow the nose properly, always leaving one nostril open. Violent blowing with both nostrils blocked may cause undue congestion

and even force infection up the Eustachian tube into the middle ear. Atomizers applied with severe pressure are dangerous, especially if they block the nostril. Spray gently from outside the nostril, rather than thrusting the instrument up the nose. The common practice of snuffing salt water forcibly up the nose when a person has a cold has caused many people to have an ear infection. Sometimes germs get into the ear with water from unclean swimming pools, and set up infec-tions which cause earache. Occasionally earache may be caused from exposure to cold weather or strong wind.

Pain in the ear can sometimes be relieved in its early stages by either hot or cold treatment. Cold will probably give greater relief in more cases than will heat. Cold can be given by means of an ice bag. Have the ice crushed fine, and always put a flannel covering between skin and ice bag. Ice bags should never be left on continuously. On and off, with intervals of rest between applications, is the usual rule.

Hot applications may be given by means of a hot-water bottle, electric pad, or electric light. The United States Children's Bureau says, "If the doctor's advice cannot be obtained, a few drops of warm (not hot) mineral oil may be put into the ear, but nothing else." Draw up the oil in a medicine dropper, and hold in basin of warm water until chill is taken off. About three or four drops of oil are instilled. Allow the patient to lie on the good ear for at least five minutes. A piece of cotton may be inserted into the ear canal following the instillation of the drops. Cold oil should never be dropped into the ear, as it is very uncomfortable

If the earache continues for more than a few hours, or if it is associated with symptoms of illness, such as fever, vomiting, or a cold, consult a doctor. The doctor will examine the eardrum and determine whether it is red and bulging. By this he will know whether there is an infection in the middle ear, and what medical or surgical treatment will be necessary. If the doctor says it is necessary to puncture the eardrum, do not hesitate to allow this. The eardrum will heal again in a few days without any damage, and even frequent punctures of the drum will not impair hearing, whereas spontaneous rupture nearly always leaves harmful effects. taken. A child should not be permitted to do entirely as he pleases; instead, he should go along with other children in his class. He should be provided with some form of activity which will increase his confidence and through success compensate for any failures. Obviously, if he is in a class that is superior to his ability, he may be removed to one of his caliber, but not until a thorough search has been made for the cause of his backwardness.

Sometimes the timid child substitutes daydreaming and excessive reading for ordinary activities in which he does not join. The timidity may follow fear of parents and teachers or fear of failing in some undertaking. Other children in an attempt to overcome their timidity and fear become bullies and "roughnecks"-a form of compensation frequently observed in the adult. Usually the true nature of the bully becomes apparent when someone smaller fights back.

Some children try to "show off"; others boast. Frequently these children see in themselves some personal inferiority, physical or scholastic, or have not had the proper parental affection. In any case, the timidity should be corrected and the child helped, if possible, to assume a healthy perspective and a healthy response to everyday problems. The child who is afraid to try something may be given simpler, even less conspicuous tasks, where he can experience successful achievement. Otherwise, instead of facing realities, he may turn away from them and develop sulkiness, temper tantrums, hysteria, and criticism of his playmates and parents.

If a child is given responsibility up to his capacity and learns to cope with this and later more difficult assignments, he will meet home and school problems with less emotion than the one who has been frustrated in everything he tried at home and at school or who has had parental

protection in everything.

As educators and others study child behavior, it becomes more apparent that the child's home life is the most important element in mental adjustment. His parents' quarrels, their nagging, their loudspoken worries on the one hand, or on the other hand their apparent love of each other, their cultured way of speaking, and suppression of discussion of worries until Junior has left the room, are all reflected in the child's reactions in his home, at school, and when playing with his friends. If unfavorable reactions occur, an attempt should be made by the parent and teacher to understand the cause, and the child should be helped to overcome them.

Just as it is important to prevent the fixation of bad habits, it is important to remember that permanent success in treatment is more likely to follow treatment of the cause of bad behavior than temporary relief of the symptoms. This is a basic principle used by a physician in the treatment of any illness. Such treatment

#### Your Child, Friend or Foe?

(Continued from page 19)

The committee recommends, in part, not using fear as a means of frightening the child into good behavior. All children normally suffer from some fear and some feeling of inferiority; to add to these fears is most objectionable. Such fears tend to become fixed and may affect the child's entire future. Fear not only causes strange behavior but it decreases confidence and ability to carry out assigned duties. The latter failing may become so noticeable that the adult will actually question the intellectual ability of a child rated highly in intelligence tests.

Fear of ridicule and antagonism from others may cause children to lie, steal, run away, and indulge in more serious forms of delinquency. In the same way a feeling of insecurity may create maladjustments in the child. Too frequently this feeling of insecurity is created thoughtlessly by the parent and the teacher. A child may feel insecure because he has no one to turn to when in trouble, or he may experience the same feeling when he is continually expected to do the impossible.

Sometimes children are not apt in all fields; in fact, they may be especially poor students in one or more topics. Such a child should not be driven blindly in pursuit of success along paths which are temporarily too difficult for him, but permitted some compensation by developing special skill in something to his liking. "Each success gives the child added confidence, while chronic defeat robs him of the feeling of self-reliance.'

Children should not be censured for their failures, but should be given opportunities for successful experience by removing the cause for failure. This does not mean that the child should be led through a completely sheltered life, but that obstacles for which he has no responsibility should be removed or he should be led around them without fear and a feeling of failure and frustration being developed.

However, the extremes must not be

should not be started in moments of anger, as the parent's or teacher's judgment may be warped momentarily. A child is not responsible for his parents' actions which have caused his emotional disturbances or which he may merely be imitating.

While a normal child naturally shows some independence, aggressiveness, and tendency toward personal experiments (which incidentally should not be suppressed routinely and unquestioningly by punishment, but rather guided into useful channels), he adopts many behavior mannerisms by imitating others or by trying to compensate for something which he does not have. Discipline which humiliates a child usually will not correct a troublesome problem; rather it will drive him to other deeds which may end in sheer dishonesty. If he recognizes the advantages of good behavior and the disadvantages of bad, he will generally choose the best course without being forced to such action through fear.



#### Soothing Balm for Sore Stomachs

(Continued from page 10)

in balancing the diet, adequate provision should be made for these essentials. If the patient is unable to tolerate tomato juice or diluted orange juice, then vitamin C should be taken in concentrated form.

6. Avoid the use of alkalies unless a physician prescribes them. If the stomach contents are made alkaline by the taking of alkalies, such as soda, the immediate effect is relief of pain but the aftereffect is to irritate the stomach, causing it to secrete more acid than otherwise. There is also the danger of alkalosis from the prolonged use of alkaline powders such as soda.

Alkalies may result in the tormation of kidney stones. Even the use of aluminum hydroxide and aluminum sulfate, which recently has become quite widespread, may have deleterious effects, such as an interference with the absorption of inorganic phosphates, iron, and other essential minerals from the intestinal tract. Constipation, fecal impaction, and even intestinal obstructions have been reported from the use of these alkalies. Doctors Dick and Eisele, writing for the Journal of the American Medical Association, January 3, 1942, state:

"It is illogical, however, to expect the use of alkalies to prevent recurrences unless one is willing to advise such use throughout the life of the patient. In many instances such ingestion of alkali would probably be more detrimental than the ulcer itself."

With the foregoing diet salt is used in moderation but no other condiment is allowed. The drinking of at least six

glasses of water a day is insisted upon. Olive oil before each meal is helpful to aid in the healing of the ulcer and to prevent constipation. Four meals a day should be sufficient, but if there is pain in the night, give the patient a glass of milk with cream added. The effect of this program should be an immediate relief of symptoms. Within two or three days the patient should be comfortable and free of pain whether up and about or at rest. Failure to gain relief indicates one of three things: incorrect diagnosis, allergy, or complications. In such case a physician should be consulted without delay.

#### + + + + Hernias

(Continued from page 14)

cutting down through the covering structures to the sac. This is dissected free, opened, and the contents examined and returned to the abdominal cavity. The sac is tied, cut high up at the neck, and returned to the abdomen. Then the various layers of muscle and fascia are sewed in such a way as to strengthen the abdominal wall, and the skin is closed. Bed rest for two or three weeks is required, and then no heavy lifting or strenuous work is permitted for several weeks.

A simple method of treatment has been used which consists of injecting an irritating solution into the hernia sac. This produces adhesions and thus attempts to cure the hernia. There are many dangers, for one cannot visualize the contents of the sac and consequently may injure an intestine, or the solution may cause peritonitis. Even if the sac is destroyed without serious damage to the contents, the abdominal wall defects are not repaired.

The best procedure for anyone who suspects that he has a hernia is to go to his family physician and have an examination. If a hernia is present, then a careful physical examination will be necessary to determine the best treatment. If the physical condition is such that the operation is advisable, it should be done. Otherwise, the physician can advise about a suitable truss. Hernia should not be allowed permanently to endanger the life or health, but should have adequate treatment



Where the sun does not go, the doctor must go,—Georgia's Health.



"I FEEL tired all the time" is a complaint frequently heard and must often be due to the stresses and strains of modern life coupled with poor eating habits. Mental depression and abnormal irritability are known to be intimately associated with malnutrition.—Walter Wilkins, M. D., U. S. Public Health Service.



## Chances are this young girl will live to be 100-

Not because she's Bulgarian; but because (being Bulgarian) she is sure to make Yogurt an important part of her daily diet.

Authentic statistics show, that in the Balkans, 1500 people out of every million live to be 100. In Central and Western Europe only 9 in a million reach this great age. In our own America the figure is still smaller. What's the secret? Metchnikoff, the great Russian

what's the secret? Metchnikoff, the great Russian microbiologist, attributed this longevity to the daily use of

## yogurt

Years of research convinced him that this cultured milk-food — eaten regularly and adequately — introduces into the gastro-intestinal tract certain "friendly" lactic acid organisms. These counteract the putrefactive process in the intestines and thus retard the break-down of vital organs which inevitably spells premature old age.

It is now possible for you to secure a Yogurt culture that is genuine and fool-proof—and that will enable you to make Genuine Bulgarian Yogurt in your own home. This culture is prepared by scientists in the world-famous Rosell Bacteriological Institute at the Trappist Monastery in Canada. You simply add the culture to ordinary raw or pasteurized milk and follow our A B C directions.

Leading health-food stores are being stocked with this Yogurt as rapidly as possible; but if your dealer is not yet supplied, mail the quick-action coupon below.

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#### By Merwin R. Thurber

ERSONALLY, I am intrigued by new things. The advances of science and invention I watch with eager interest. And garden discoveries are no exception. Every year I await with anticipation the announcements of the plant wizards. This year I have discovered the dasheen. It really isn't new, for it is already popular in parts of Europe and Asia. But it is new to me, and it is probably new to many of our readers.

The first thing that interests me about the dasheen is the fact that it is good for both food and ornament. Dasheens produce large tuberous roots which are used as potatoes are, blanched stems which may be used the same as asparagus, and leaves which are good as greens. The leaves are ornamental and similar to the popular elephant's ear cala-dium. Imagine planting some dasheen in the canna bed, enjoying the foliage all summer, eating greens as occasion offered, and then in the fall digging tubers that will substitute for potatoes. This reminds one of the pro-verbial hybrid that is supposed to grow tomatoes above ground and potatoes below.

Now to some facts: The tubers sometimes

reach a weight of six pounds. In field cul-ture, crops of six hundred to nine hundred bushels an acre have been produced. The United States Department of Agriculture reports yields of 450 bushels an acre on its different experimental grounds.

Dasheens will grow on land that is too wet for other crops, even land that is subject to short overflows ruinous to other crops. They will also grow in hot, dry regions. But an abundance of humus in the soil is essential to successful growth, and a liberal use of well-rotted manure is beneficial. A rather long growing season is necessary to produce large tubers; so dasheens are not a root crop for the North, where frost-free seasons are short. But even there they may be grown for greens, for the stalks, and for ornamental purposes.

Dasheens have 50 per cent more protein Dasheens have 50 per cent more protein than potatoes and 50 per cent more starch. They taste richer and more tempting than potatoes. They are prepared in all the ways that Irish and sweet potatoes are usually served—baked, boiled, fried, creamed, stuffed, scalloped, and as chips. Fluted with a vegetable slicer and fried like potato chips, they are declared by some to be the most delicious of any of the dasheen dishes. With this method of preparation the delicate, nutty flavor of the dasheen is brought out to best

When it is desired to use the stems asparagus fashion, the plants are grown under a box or barrel, in order to blanch them. The first cuttings can be made thirty-five days after the tubers are set out, and subsequent cuttings every ten to fourteen days. Five to eight crops a year may be harvested.

most cases. Itching and burning is relieved by sponging, either cool or warm, or by alcohol rubs. Sometimes powder rubs are appreciated. Keep hangnails trimmed. Otherwise the patient may pull them and thus cause superficial wounds that may become infected. And infection around the nail may be bad business. Routine oiling is not good hygiene.

Mrs. A.-Is there anything one can do to control the spread of infection?

Doctor.-Quarantine, of course. Then be careful of secretions from nose, throat, ears, and so forth. Use tissue, and pin a paper sack to the bed for the patient to deposit the tissue in as it is used. Take it out and burn it periodically. There is probably no danger from the desquamated skin-the skin that peels off.

Mrs. A .- How do you handle the dishes? Doctor.-Set aside a large kettle and deposit dishes, basins, and utensils therein. Boil everything before washing.

Mrs. A .- How about medicines?

Doctor.-You leave that to me. Sulfa drugs can be procured only by prescription, and they are dangerous in unskilled Sulfa-diazine, used efficiently, shortens the course of the disease and the period of quarantine by at least one week. In addition to a gargle, preferably lysol, three drops to half a glass of hot water, is good. Vitamins are always in order; especially B complex and C. Of course, you can get your C from citrus juices.

Mrs. A.-Thank you, Doctor. I will keep Bill in his own yard for ten days, and if anything shows up, I shall call you.

Good-by.

#### Scarlet Fever

(Continued from page 11)

complications, I think you call it. Doctor.-Yes, Mrs. A., there are some very serious complications that must be watched for. Kidney disease is one of them. In the second or third week these important blood filters may succumb to the poisons of scarlet fever, and then we have nephritis, or Bright's disease. Bright was the man who first described kidney inflammation or itis. Nephro means kidney-thus nephritis means inflammation of the kidney. It is something you must watch out for. It develops insidiously, and unless great care is shown during convalescence, the kidney may be severely and permanently damaged. Of course, since the advent of sulfa drugs we see less trouble from this source.

Mrs. A .- You frighten me. What can you do to prevent this complication from developing?

Doctor.-Provide good scientific care and good nursing. Part of it is plenty of water and extreme care to protect against chilling.

Mrs. A.-What are the other complications?

Doctor.-Inflammation of the middle ear-we call it otitis media. About 10 per cent of all hospital cases used to have it, despite good care. There is less of it now with sulfa drugs, of course. Then we get mastoid infections, sinus infections, pneumonia, rheumatic fever-a great many undesirable things.

Mrs. A.—Sounds as if it is a good disease to avoid if you can. Doctor, you have aroused my interest now. How do you nurse these cases in the home?

Doctor.-Well, of course the patient is quarantined and under the care of a physician. The immediate care, the nursing, the really hard work that usually falls to mother's lot, is the biggest and most important job. Briefly we might outline it as follows:

1. Bed rest for approximately three weeks, with the room temperature as uniform as possible-never below 60° F.

2. Daily baths-tub, or if too sick a bed bath or cooling sponge, maybe only an alcohol rub. In fact, cooling sponges or alcohol rubs may be given as frequently as necessary to keep the temperature down and the patient comfortable.

Mrs. A.-Pardon me, Doctor, but how high do you allow the temperature to go before starting these cooling sponges?

Doctor.-Usually at 103° F. or over we sponge. There is no justification in the use of drugs to lower fever. Nature provides a febrile reaction to burn out infection, but it is helpful to cool the body down by the employment of sponging when and if it reaches a certain point. But to proceed with our program:

3. Diet is important. It is chiefly liquid during the acute stage-gruels, soups, milk; then custards, milk toast, poached egg, cereals, vegetables, fruit.

4. Force the fluids-water and fruit juices-at least one glass an hour.

5. The care of the skin is important in

#### Dry and Oily Skins

(Continued from page 7)

if the list of the alleged beautifying substances were reduced 90 per cent. Is it possible that the wives of the administrators still control the policies of their

Working with grease may also increase the oiliness of the skin locally. For instance, if a clear-skinned boy goes to work in an automobile repair station and is assigned to work in the pit beneath a car, it will be only a short time before his oil-soaked clothing will cause a wellmarked acne in the portions of his skin that are kept oil dampened.

Acne is primarily a disease of adolescence, beginning with the increased activity of the sebaceous glands. For all practical purposes dry-skinned persons do not develop the disease. It is characterized by the presence of an oily skin, blackheads, and small bumps, usually containing pus, on the face, shoulders, chest, and at times on the upper and outer surfaces of the arms. Scars may or may not result, depending upon the depth of the lesions.

The disease can be controlled by diet,

regulation of the bowels, local hygiene of the affected parts, exposure to sunlight or some type of drying ultraviolet lamp and occasionally to the X ray. The disease is not due to allergy, and all the skin tests in the world are of no value; neither are vaccines nor the local or general employment of the various sulfa drugs. The equally fashionable vitamins have no effect in the young. The author is fully aware that many of these last-named remedies are often recommended, but the experienced dermatologist knows their lack

Inflammatory dandruff almost invariably starts on the scalp as a dry or greasy dandruff, that later becomes inflamed and then spreads either to the midline of the face or to the ears. Later it may involve the midline of the chest or back, the armpits, and frequently the navel and pubic regions. In fact, the entire body and limbs may be involved in severe cases. The palms and soles are never affected. This condition may be readily cured or it may prove very difficult to handle, but the general treatment is more or less similar to that given for acne.



#### Vegetable Steaks

(Continued from page 17)

better than the protein of skim milk. This indicates that whole-wheat and soy flour proteins supplement each other best in this ratio to make an excellent complete protein.

Science, it seems, is proving to us that we already have on the market many products of vegetable origin that are equal to and better than animal protein.

There has been a great deal of discussion as to whether man can live successfully on plant proteins alone; yet there is very little scientific data at the present time.

Professor E. B. Hart of the department of biological chemistry of Wisconsin concludes that since herbivorous animalscows, sheep, goats, swine, rats, and chickens-have now been successfully grown with plant proteins as the only source,



#### By William G. Wirth, Ph.D.

S I recall, Oliver Wendell Holmes, in his Autocrat of the Breakfast Table, speaks of one of the boarders in the house where he made his abode as "the model of all the virtues." This good woman was so prim and precise, so monotonously proper and self-righteous on every occasion, that she was the bore of the group. Somehow they never felt comfortable in her presence; she was too far out in front on the moral field of human struggle. The rest of the soldiers in the battle of the spirit against the flesh never caught up with her. With his delightful style and charm, Doctor Holmes plays her up and gives us a lesson in our relations with our fellows that is wholesome.

One of the fine arts of living is being righteous in our dealings with others, but not in a manner to nauseate them with our superior moral and spiritual atmosphere. Man this earth has seen, the perfect One, the Galilean, who could say, simply as a matter of plain fact and not from studied self-right-eousness, "Which of you convinceth Me of sin?" made all men comfortable in His company. He could eat with the publicans and sinners, and make them feel His camaraderie; He could go to the banquet of Simon, the wealthy Pharisee, and make these aristocrats of Jerusalem act comfortable and friendly. So attractive was His personality, so interested was He in every person He met, that the proud Nicodemus sought Him out; and so popular was He in His appeal that the common people flocked to Him and "heard Him gladly.

Yes, it is all right to be models "of all the virtues," but not such models as we see in department store windows, which we can admire but cannot get close to. The kind of models we need are those that can walk right along with us, so that we can receive good from them through actual association rather than through our empty admiration. I heard a friend of mine say the other day that while he had a good dad, he and his brothers never got close to him. In his Olympian parental righteousness he was always up there; his sons were down here. They never knew him as a chum, a comrade, an intimate. Perish this kind of parenthood! In that son's memory this father is simply a model in the store window—nothing more. This puts us in mind of the Barrett sisters of Wimpole Street, with their severe, self-righteous father encased in the smug and disgusting shell of his Victorian propriety.

No, let us not take ourselves too seriously. We still live among men and women who need our kindly ministrations and our wholesome, friendly, human contacts. It is a great man who can be a boy when he is with boys. I know some preachers that freeze away from them the youth and young people of their parishes, because they are always in the pulpit. They seem to be unable to get down to the plane of Jimmy or Jane. Poor deluded men! They are pathetically taking them-selves too seriously.

There is a dignity to be maintained, a manhood and a womanhood to be preserved; but let it be of the kind that makes everybody feel comfortable and truly human in our presence. Do this and you will be on the way to being a "son of man" as was the Naza-rene, "who went about doing good, and healing all that were oppressed of the devil."
There are many who are oppressed of the devil these days. Are you making the op-pression easier or heavier by your attitude toward them and your association with them?

surely similar results can be secured with

Professor Carl Schmidt, of the University of California at Berkeley, says that it is altogether likely "that as long as we ingest proteins from a number of sources we shall not be confronted with an amino acid deficiency, provided that a sufficient amount of protein is ingested. Vegetables, especially the legumes, contain a considerable amount of protein. This has been proved by vegetarians."

A recent Gallup Poll informed us that there are 2,800,000 vegetarians in the United States, exclusive of the armed forces. Nevertheless, it must be conceded that these people enjoy excellent vigor and health. They suffer from no more disease and show no more signs of malnutrition than do the nonvegetarians.

"Owing to the incomplete data on the amino acid composition of natural foodstuffs and to the unreliability of some of the analyses which are in the literature,' Doctor Dunn, of the University of California in Los Angeles, confirms the opinion of other scientists that we cannot at the present time give definite data as to the quantities of protein necessary for growth, reproduction, lactation, and other physiological functions. He suggests that as a safe measure we eat more than the minimum amounts of protein and hence the amino acids will be supplied as well.

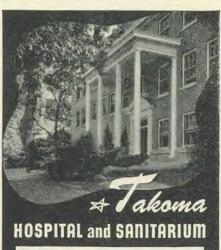
If we are to judge from the opinion of The National Week, June 18, 1943, page 13. Americans will do well to become informed on the subject of vegetable proteins. We are told that the feed situation promises to put a real ceiling on livestock

"Unless feed production this year equals last year's crop, large-scale liquidation of livestock may be necessary, with a consequent temporary oversupply of meat, fol-

#### Components of Protein or Amino Acids in Foods

| FO  | OD = Va  | line | Leucine | Isoleucine | Arginine | Lysine | Threonine | Methionine | Phenylalanine | Tryptophan | Histidine |
|-----|----------|------|---------|------------|----------|--------|-----------|------------|---------------|------------|-----------|
| 1   | Milk     | 100  | *       | -          | *        | *      |           | *          |               |            |           |
|     | Sovbeans | *    | 10      | 46.7       |          |        |           |            |               |            |           |
|     | Wheat    |      |         |            |          |        |           |            |               |            |           |
|     | Germ     | *    | *       |            |          |        |           |            | 9.            |            |           |
| 4.  | Corn     |      |         |            |          |        |           |            |               |            |           |
|     | Germ     | 9    |         | 1.87       |          |        |           |            |               |            |           |
| 5.  | Wheat    | *    | .0      |            |          |        |           |            |               |            |           |
| 6.  | Potatoes | *    | .0      |            |          |        |           |            |               |            |           |
|     | Tomatoes | 4    |         |            | *        |        |           |            |               |            | 19        |
| 8.  | Avocado  |      |         |            |          |        |           |            |               |            |           |
|     | Ruta-    |      |         |            |          |        |           |            |               |            |           |
|     | bagas    |      |         |            |          |        |           |            |               |            |           |
| 10. | Peas     | -    |         | . *        |          |        |           |            | 4             |            |           |
| 11. | Common   |      |         |            |          |        |           |            |               |            |           |
|     | Beans    | -    |         |            |          |        |           |            | *             |            |           |
| 12. | Peanuts  | *    | *       |            |          | *      | *         | *          |               | *          | *         |

\* Indicates the presence of the essential amino acid listed at the head of column.
1. 1-5 reported by National Research Council (Preliminary report by Committee on Protein Food).
2. 6-11 reported in Composition of Food by Winton.
3. 12 reported in Journal American Dietetic Association, Vol. XIX, No. 9, page 638.



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lowed by a real meat famine.

"But cereals and vegetables provide a cheaper, quicker source of actual human food values than do livestock and livestock products. Seven pounds of corn fed to a hog produce one pound of pork containing 1,900 energy units. The same seven pounds eaten as corn meal produce 11,900 energy units.

"That is why food officials are considering changing the pattern of farm production to take in more direct-consumption foods. A start was made this year with the official request to farmers to plant more soybeans, potatoes, and other direct foods."

It is certain then that the war will still further place the direct foods—cereals, legumes, and vegetables—upon the tables of Americans and will still further remove indirect foods such as meat, butter, eggs, and milk.

#### + + +

#### The Man Who Conquered Surgical Shock

A Short Sketch of a Great Doctor Written Shortly Before His Death

EW are the maladies that strike as swiftly, or as deadly, as shock.

A few years ago every major surgical operation was endangered by this condition. After the operation was over, and the patient apparently was getting well, he would suddenly turn pale, exude cold sweat, breathe rapidly, and become unconscious. Death often resulted, while mystified surgeons looked on, helpless.

Such an experience happened over forty years ago to Dr. George Washington Crile, then a young intern in a Cleveland hospital. A friend, a healthy young medical student, had been injured by a streetcar. He was rushed to the hospital and safely operated upon.

But then came shock. By the next morning, Crile's young friend was dead, and his teachers in medicine could only shrug their shoulders and say, "We do not know what causes surgical shock, or how to prevent it."

Young Crile resolved to find out, and for thirty years he experimented. At last he discovered that shock is caused by injury to the brain resulting from fear, exhaustion, or extreme pain. The brain cells, so affected, swell up, and literally "explode."

After that, it was easier to prevent shock in surgical operations. The main nerves leading to the brain were first deadened with cocaine. Then the brain could not receive messages of fear or pain. Surgical shock is rare nowadays, and doctors are learning how to treat shock caused by accidents, misfortune, or terror

In the meantime the young intern who resolved to study the cause of shock has

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|--|--------------------------------|
| 8-oz. Jar MEATASTE, yeast powder for broth,  | 4.00                           |
| gravy  | .75                            |
| 100 Lecithin Capsules  | 1.90                           |
| 4 oz. Carotene in Veg. Oil (4450 u. Vit. A in  | 1.50                           |
| 34 tsp.)<br>100 Chlorophyll Tablets (made from green vege-   | 1.00                           |
| tation)  | .75                            |
| lettuce) 230 10-grain Celery Tablets (sodium-rich)   | 1.50                           |
| 100 Garlic and Parsley Tablets   | .75                            |
| 1 lb. Chocolate Soy Milk, just add water, deli-  | 20.00                          |
| cious  | .50                            |
| Pkg. SOY-GRASS COOKIES, Wheatless, Sugar-<br>less, Alkaline  | .25                            |
| \$2 orders prepaid east of Mississippi,<br>west of Mississippi add 20%   |                                |
| Ask for price list and recipe sheets   |                                |

VEGETABLE PRODUCTS CO. 480 E. Main, Box 145, Rochester, N. Y.

#### ViVi-Ta MEATASTE

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Throughout the United States, and in many other countries, is found a distinctive chain of medical institutions known as sanitariums. To the many thousands who have been guests in these unique health institutions, the name Sanitarium describes not merely a hospital, though the best of medical care is given; nor does it describe simply a rest home, though many come primarily for rest. Rather, it denotes a unique combination of both. The word Sanitarium also carries with it the idea of health education and disease prevention, for those who come to these health centers receive instruction in the principles of healthful living.

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 Eugene Leland Memorial Hospital, Riverdale, Mary-land

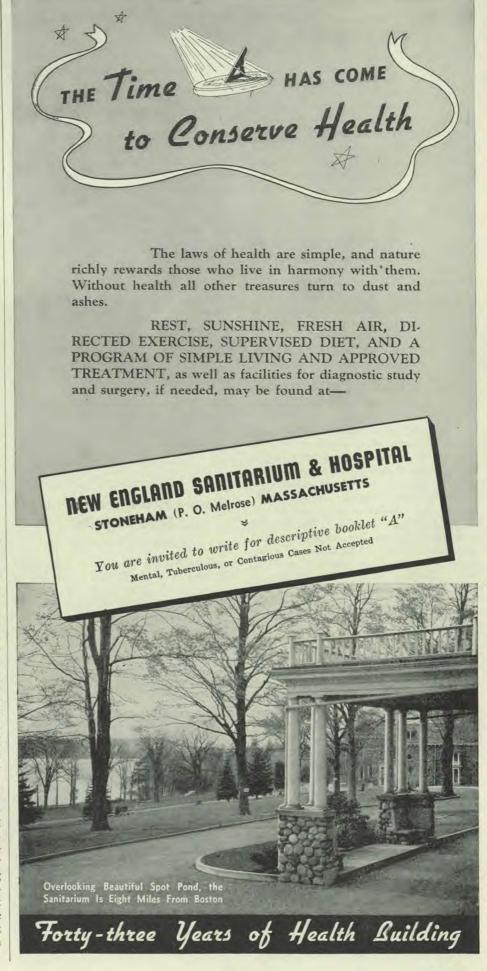
land
Florida Sanitarium, Orlando, Florida
Georgia Sanitarium, Route 4, Box 240, Atlanta, Ga.
Glendale Sanitarium, Glendale, California
Hinsdale Sanitarium, Hinsdale, Illinois
Loma Linda Sanitarium, Loma Linda, California
Madison Rural Sanitarium, Madison College, Tenn.
Mountain Sanitarium, Fletcher, North Carolina
Mount Vernon Sanitarium, Mount 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

Portland Sanitarium, 932 S. E. 60th Avenue, Portland, Oregon Resthaven Sanitarium, Sidney, British Columbia, Canada St. Helena Sanitarium, Sanitarium, California Walla Walla Sanitarium, Walla Walla, Washington White Memorial Hospital, 312 N. Boyle Avenue, Los Angeles, California

become one of the country's most famous surgeons. He is now head of the Cleveland Clinic, at Cleveland, Ohio. To this place of healing come thousands of sufferers each year-people with enlarged glands, with difficult diseases, with cancer.

To watch his expert operations on these difficult cases, surgeons come from all over the world. Doctor Crile is not a "man in white;" he wears a green gown and mask when operating; his operating rooms and theater are painted a pleasant green, and even the uniforms of the nurses and attendants, and the finish of the operating table, are green. White scares the patient, he believes, while green soothes him.

Doctor Crile is now seventy-eight, though he looks much younger. Still vigorous, he likes best of all to hunt big game. A few years ago he went on a hunting trip to Africa, where singlehanded he bagged many animals younger men would hesitate to tackle, including an elephant and a lion. He is the inventor of the Crile lion shot, which most hunters now use. By smashing a nerve center in the shoulder of the animal, it stops the charge, which a shot through the heart will not do.



#### A Much Debated Subject Receives Calm Study

(Continued from page 4)

a working day, suffered measurable deterioration in physical vigor."

This led the investigators to observe, after setting forth further findings, that "It seems reasonable to conclude from this experiment that a daily protein intake of 50 gm., of which as little as 5 gm. consists of animal protein [in this case, milk], is perfectly adequate for good health and efficiency, providing, and this is a most important proviso, the diet is adequate in other respects."

This carries the investigators on to a discussion of possible protein lack in the wartime diet of America. They ask the question: "Have present wartime food conditions in this country posed special problems with respect to protein foods and the health of the people?" They reply: "It is our belief that the answer to this question is definitely no. True, certain protein foods are rationed and others may be rationed, but as long as this country has access to a plentiful supply of calories, and a variety of whole-grain cereals and legumes, it is most unlikely that impairment of health from protein deficiency will ever occur."

The investigators realize that "there are definite psychological problems of convincing a population used to eating a high-protein diet that one of much lower protein content, and low in animal protein, will not necessarily impair health. Lumberjacks may demand plenty of red meat to get timber cut, but that demand rests on habit and not on a nutritional or medical basis." This language is unequivocal. We have heard it used by vegetarians, but we are here quoting from a scientific report. We might add that lumberjacks are not the only ones who are troubled with "psychological problems" in this matter.

The task of "postwar feeding operations in wartorn countries," leads the doctors to make this observation in concluding their report: "There are protein foods that could be made available in this and other countries; protein foods which are stable and of which stock piles could be created for the time when they are needed in large amounts; protein foods which are superior not only in protein but in other essential nutrients. We refer specifically to wheat germ, corn germ, yeasts, dried legumes, and the various products which can be made from peanuts and soybeans. There is sufficient experimental evidence in animal nutrition that the vegetable proteins we have mentioned are high quality proteins. They have an excellent supplementing quality among themselves and when used with the more common vegetable proteins-and man does not live exclusively off of any one two proteins. We do know that when properly prepared these superior vegetable

proteins are well digested by human beings.'

These findings are here reported, not with any idea that they provide a final conclusion to the question of the complete adequacy of a nonflesh diet, nor to the question of the amount of protein needed daily. Incidentally, this latter question is not of the essence of the controversy between those who extol meat and those who sing the praises of vegetables. But so far as these findings go, they support the conclusions reached by the most eminent of nutritionists, that meat is not essential to the diet. In fact, for the average vegetarian, who includes milk and eggs in his diet, the superfluousness of meat has long been evident to those working in the field of diet. Milk is the best source of protein known.

To these conclusions regarding the adequacy of a nonflesh diet scientists are increasingly coming as they conduct controlled experiments on groups of individuals and as they analyze food elements in the laboratory. Of course they might have found ample proof in the fact that millions of earth's inhabitants have lived for long generations on little or no meat and yet have displayed an amazing stamina! Vegetarianism is not a new diet formula. And the findings here cited provide further proof that it is not an irrational one!



#### Simple Home Treatments to Ease Arthritis

(Continued from page 9)

exposure for ten minutes on both front and back will be all that is needed to bring a healthy glow to the skin.

In conclusion, may we emphasize that the daily use of some form of heat for twenty or thirty minutes, followed by ten minutes of massage, and finally exercising the joint through its full range of motion, is a threefold treatment, simple yet markedly beneficial in the care of arthritis.



Your RED CROSS is at his side

#### Family Physician

(Continued from page 22)

Diet for Colitis

"Please send a diet for colitis."

We are enclosing with this a suggestive dietary outline for colitis. Such an outline, of course, must be regarded merely as a suggestive plan. The fundamental principle in this diet is that the foods shall be in finely divided condition, free from coarse, rough fiber. Many persons suffering from an acute form of colitis are not able to use fruit at all for a period of several months, and vegetables, if used, must be in a finely puréed form. It is desirable to include fruit and vegetables in the diet if possible, so as to have a suitable supply of minerals and vitamins. However, if the bowels will not tolerate this type of food well, a little careful study should be given to the supply of vitamins so that there will be no deficiency while using refined foods of other types.

#### Elastic Stocking

"My veins are hard, swollen, and painful from knee to ankle. Would an elastic stocking help?"

An elastic stocking often gives great relief to the discomfort arising with varicose veins. We like better, however, a roller bandage which can be started at the foot and rolled like a puttee around the heel and up to the knee. Such bandages are available at most drugstores. They allow perfect freedom of the muscles without discomfort from pressure. We think it would be wise to talk your problem over with a physician, however, for sometimes varicose veins present other needs than merely holding them compressed.

#### Blood Pressure and Stroke

"Please give me some information on high blood pressure. Is there a certain level at which a stroke may occur?"

There are a number of limiting conditions that should be considered when one discusses high blood pressure. It may come from damage to the kidneys or it may come as arteriosclerotic changes take place generally in the body. This latter form of high blood pressure is that which is most commonly found in aged persons, and the adjustment or change of the blood pressure reading is not always easily accomplished. Of course, with either form we must recognize that nervous factors contribute to the ultimate reading. These may be regulated by avoiding strain and stress and worry.

There is no fixed level at which a stroke may occur. We have known strokes to occur with a normal blood pressure of 120 and we have seen people carry a reading of more than 300 without a stroke. The condition of the blood vessels must be considered in this connection. Commonly strokes occur at a little over



STAKE-LETS, a combination of gluten and soy beans. They are already sliced in the can. Serve in the place of a meat portion.



SOY CHEESE, Soy curd (Tofu) seasoned for croquettes, salads, sandwich spreads, etc.



KREME O'SOY for those allergic to cow's milk and for special diets. A liquid not concentrated.



NOT-MEAT, a mealless loaf for cutlets, roasts, patties, croquettes, salads, etc.

### Sorry! WE CAN'T SUPPLY DEMAND

Although our production facilities have been greatly expanded to meet wartime needs, we regret it is not possible for us to supply the increased demand.

Consequently dealers may not have a complete stock of Madison Foods on hand at all times. Our facilities at present are devoted exclusively to production for civilian use and we assure our many patrons that we shall do everything possible to supply their needs as we operate under war emergency restrictions, shortages, and delays.

Many of our patrons whose special dietetic needs restrict their use of the ordinary foods, have been penalized by our inability to supply their needs. To these we say, first, make every effort to use the complete variety of Madison Foods shown on this page. If this does not solve your problem endeavor to find a substitute.

Our laboratories are working tirelessly to find ways to supply all our patrons with quality foods, and new foods are being developed which will be available soon. In the meantime your co-operation in purchasing only enough food for present use will make it possible for all to share alike.



YUM, a mild bologna flavor. Contains soy beans, wheat gluten, and seasonings.



ZOYBURGER, excellent for sandwich spreads or served like a steak with onions. Recipe on the can.



VIGOROST, a vegetable steak to be prepared like meat, also for sandwiches and salads.



ZOY-KOFF, not a trace of caffein. No nerve stimulants. Two grinds —regular and fine, Prepare like coffee

### Food Will Win the Peace USE IT WISELY

PROTECTION
of Your Health

Available at health-food stores and specialty groceries, or write Madison Foods.



WHEATASOY, an alkaline breakfast food, ready to eat. Contains rich grain malt, whole wheat, and soy-bean flour.

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## The Land of

Are you homesick for this land, this lovely land of beginning again, where you recapture lost youth and make all those golden dreams come true? Then you must know April. April is the time of beginning again. A worn old world forgets her age and remembers it is April. She strives to outdo all her many Aprils, and you marvel at the beauty around

Do you feel April in your heart? Oftentimes it is a matter of experiencing optimum health. When you know that buoyancy of spirit, that zest for living, you are entering the land of beginning again.



Beginning Again



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