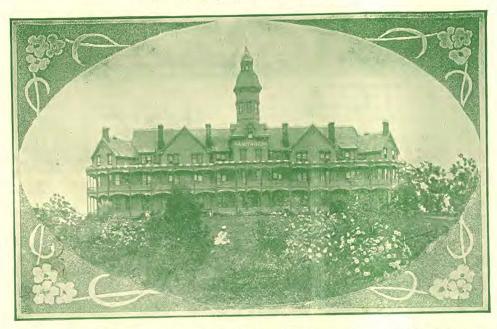
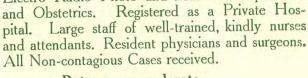


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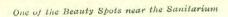
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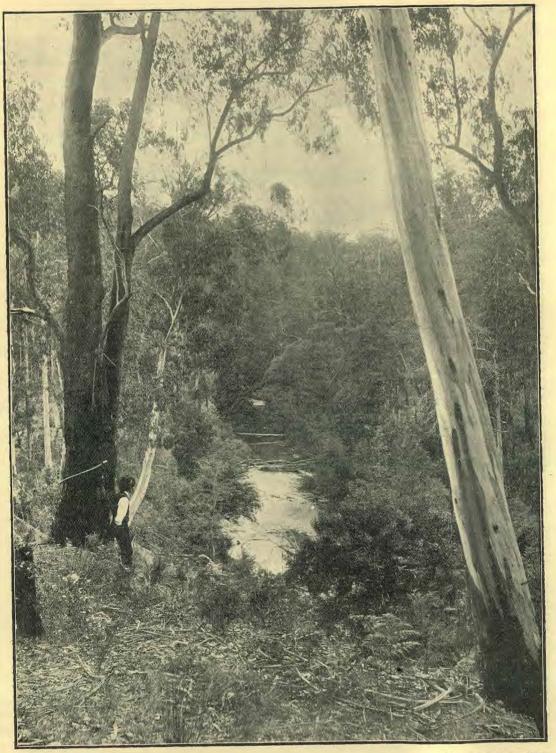
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Vol. 4

DECEMBER-JANUARY, 1914-15

No. 6

### First Aid in Summer Ills

FRANKLIN RICHARDS, M.D.

ID-SUMMER maladies are here, and families should know how to prevent them, and also how intelligently to render prompt first-aid help to those attacked. Simple measures at the outset of an illness are often all that are required. Neglect these summer sicknesses, however, and the most skilled attendance called too late is doomed to fail. Even a little knowledge used in time will alleviate suffering and save life.

Attend to the diet in mid-summer. Serious gastro-intestinal disorders originate in indiscretions in eating. Some may eat prawns and cockles and other wriggly things as intrepidly as a barn-yard fowl gobbles earth-worms, and for a time at Nevertheless serious illleast escape. nesses have arisen, and valuable lives are known to have been lost through poisoning and infection of the food-tube caused by eating crustaceans and shellfish. Innumerable other indiscretions will occur to the individual reader. This example of erroneous eating is intended to be merely a reminder.

#### Gastro-Enteritis: What to Do

In poisonings and infections of the food-tube, which are evidenced by vomiting and purging, pain, coated tongue, foul

breath, and such-like symptoms, thorough cleansing and disinfection is the first need. Warm water drinking serves a useful purpose, salt or baking soda being added, one teaspoonful to the pint. this is returned by the stomach it cleanses that organ very well. If not, it exerts its cleansing action over a more extended surface, the baking soda neutralising acids and otherwise improving bad conditions. Boiled water alone will often cleanse the food-tube if repeated in tumblerful doses at intervals of twenty or thirty minutes until six or eight glasses have been drunk. The water may be taken hot or cold, and with or without salt or soda. It may even be sweetened with cane sugar, as the latter has a disinfectant action. Lemon juice may also be added, or orange juice sipped without dilution. The cravings of the patient should decide whether hot or cold, sweet, sour, or saline be given. If not so much fluid can be swallowed, it may be wise to add sulphate of soda-Glauber's salt—or tartrate of potash and soda, or the more universal Epsom salt in teaspoonful doses to less water, repeating three times hourly till effective, which will often be within an hour or two. Meanwhile heat is applied to the abdomen, the feet kept warm, and the patient quiet in bed. In the case of children the treatment should be varied with a hot bath at the commencement, especially if convulsions be threatened, about one-half to one-fourth adult doses, and hot saline injections to cleanse the bowel and stimulate the little patient. Food is withheld in all cases for from six hours to twentyfour or more, the nourishment then allowed being simple and in small amounts.

#### Summer Diarrhoea

This scourge of infants is not so easily treated as prevented. Bottle-fed infants are the victims through tainted, fly-contaminated milk and sour bottles, nipples, Prevent by procuring pure fresh milk, which is immediately sterilised and quickly cooled, and covered with several thicknesses of muslin. Renew this supply of milk at least twice daily. If it is impossible to do this, feed Glaxo or other good dried milk, malted milk, or patent food advised by your physician. Whatever is fed be sure the bottles are cleansed with soda and hot water at least once daily. Keep the flies off the nipples of feeding bottles. Cover the bottles over with clean muslin. Once or twice daily give the baby a spoonful or two of some fresh fruit juice a half hour before the milk feeding, which may with advantage be deferred that long, as babies as a rule are fed too often. As soon as possible throw away all bottles and feed your baby with a spoon.

Stop milk at once when diarrhoea sets in, but give boiled water very freely. Baby can live on water a day or two, if kept warm and quiet, without harm. teaspoonful or two of olive oil with a teaspoonful or less of castor oil will help to clear the curds from the bowels, and so relieve the irritation. This dose may be repeated, if required within the course of two or three hours. A hot bath is useful at the outset, as are also hot saline injections. Heat applied to the abdomen is grateful, and "antiphlogistine" or "thermofuge" may be used. For the milk feedings may be substituted albumin water, and later barley water or rice

water. After a day or two some manufactured infant's food containing no milk is best used for a few days at least, or until it is found by careful testing that baby can again digest milk if it is well diluted with infant's food or barley water.

#### Do Not Give

opium preparations to infants or young One drop of laudanum may Opium is present in kill an infant. chlorodyne, Dover's powder, soothing syrups, and teething powders. give a child a dose of mixture which has been made up for an adult, for this may contain some opium preparation. A safe, simple remedy for children is composed of aromatic chalk powder, two teaspoonfuls; sugar, one teaspoonful; dillwater, six teaspoonfuls. Dose: one teaspoonful every two hours.

Appendicitis, intestinal obstruction, and other serious intestinal disorders should be suspected when vomiting persists, when there is distention of the belly, persistent, localised tenderness or pain, a tumour or swelling to be felt, quick pulse, rise of temperature, thirst, or other unfavourable symptoms. A doctor should be called to such a case, and the sooner he can see the patient the better. medical help is difficult to obtain, give an enema of oil and soapy water, two tablespoonfuls of castor oil to two pints of warm, soapy water; or if olive oil is used, three times as much. Such enemata, repeated every few hours with the patient lying on the left side, are said to have often cured appendicitis. In any case, this treatment does no harm, unless it delays too long the doctor's coming. No food or medicine should be given by mouth—not even water, except ice-cold in sips, or, better still, small bits of ice Hot fomentations, turpentine stupes, and mustard plasters or poultices to the abdomen are all useful first-aid methods of treatment. If the surgeon is required, fetch him in time.

Intestinal obstruction which is due to the strangulation of a hernia or rupture may sometimes be relieved by a hot bath,

which, by relaxing the tissues, permits the hernia gently to be pressed back through its ring into the abdomen again.

#### Sunstroke, Heat-Stroke

These follow prolonged exposure to great heat, either the sun's rays or the heat of a furnace. A feeling of sickness, faintness, giddiness, shortness of breath, thirst with burning and throbbing of face and body develops. The pulse is quick and bounding, temperature high, and insensibility with stentorious or snoring breathing may follow. Treatment consists in undoing all tight clothing, procuring shade, coolness, and air so far as may be, and applying large, cold-water or ice compresses to the head, neck, and upper part of spine. When consciousness returns, give water to drink freely. On recovery, carefully avoid excessive heat.

#### Fainting, Convulsions, Fits

Fainting is common in mid-summer, and may be due to heat and general or heart weakness, tight clothing, a close or crowded room, fright, injury, or bleeding. A feeling of faintness in a public place may be overcome by bending well forward in one's chair so that the head is below the level of the knees. With nurses and medical students it is the common practice quickly to lie down when faint and giddy, thus forestalling a more abrupt descent with a thud to the operating-room floor. A person who faints should immediately be lowered into a reclining position on the back, with the head rather lower than the feet. Neck and waist bands and tight clothing should be loosened, injuries attended to, free circulation of pure air provided, and the patient stimulated with smelling salts, cloths wrung from cold water applied to the face, neck, and chest, and sips of cold water on the return to consciousness. If the pulse is imperceptible or feeble, give sips of hot drinks, a hot saline enema, or stimulate the heart with alternate hot and cold compresses to the chest. On recovery, keep the patient lying down until the colour is good and the pulse is strong. It may be necessary

to get him to bed in an airy room, and warm by means of hot bottles, bricks, etc., well wrapped in cloths or garments to prevent burning.

Convulsions in children are best treated by the removal of the cause, and immersion to the navel in hot water combined with cold compresses to the head. bath is quickly tested with the elbow, which should bear quite comfortably its heat, and yet be nicely reddened by immersion for a half minute. The cause to be removed is constipation, by means of the warm soap and oil enema, or indigestion or acute gastritis by means of an emetic (salt and water), followed by small doses of mixed oil (olive and castor). Powders or other remedies, if required, are best made up to suit the child's special needs.

. Epileptic fits require but simple treatment during the attack. It is not necessary, though so often advised, to put sticks and other things between the teeth to prevent the tongue being bitten, as this almost never occurs. Nor is it necessary to hold the patient to prevent the arms and legs being thrown about, except to such an extent as the avoidance of injury to these members indicates. The clothing should be loosened, that is all, and the patient placed in as comfortable a reclining posture as circumstances admit. If on a bed or couch he should be kept from falling to the floor. He will soon fall into a sleep, which should not be disturbed unless unduly prolonged. If fit follows fit for hours call a physician.

Hysterical fits require different treatment. They occur in either men or women who have not too good mental poise and lose control of themselves. The fits occur in the presence of onlookers—an audience is essential to success from the patient's viewpoint—and the more sympathetic the onlookers the more uncontrolled the attack. The patient never hurts herself in falling, as is often the case in epileptic seizures, but subsides in some comfortable spot, clutches her hair, grinds her teeth, laughs, cries, kicks, and throws herself about, or lies rigid, appar-

ently unconscious. She is best left entirely alone. The audience should at once retire, observations being secretly taken from time to time, when the patient will likely be seen to be "taking notice." If she remains too long in her attacks—that is, more than three or four hours—it might be best to call in a physician, enlightening him before he sees the patient as to the suspected nature of her trouble.

#### Mosquito-Bane

Space permits but one more hot weather hint, but as this has added greatly to the comfort of many who have used it in times past, we add it as a postscript to our readers. Mosquito-bane: Mix equal quantities of the following, and apply at night to keep off mosquitoes: Oils of citronella, eucalyptus, birch tar, and tincture of pyrethrum flowers.

#### Caffeine Responsible for Nervousness

THE effects of the excessive use of coffee, tea, and other caffeine beverages are well known. Although the caffeine is combined in these beverages naturally, and they are as a rule taken at mealtime, they are recognised by everyone as tending to produce sleeplessness, and often indigestion, stomach disorders, and a condition which, for lack of a better term, is

described as nervousness. It has been suggested that these effects are brought about by other constituents in tea and coffee than caffeine, but the fact that when caffeine is extracted from these bodies and administered in a pure state, similar phenomena are produced, shows that the evil effects noted are due particularly to the alkaloid caffeine itself.

There is quite universal agreement among experimenting hygienists and physicians that a stimulating effect on both muscle and brain action is produced by caffeine, but there is a very wide difference of opinion among experts as to whether it is desirable to produce this effect. The combined effect, however, of caffeine, nicotine, and distilled alcohol has undoubtedly done much to produce the large number of neurotics found in the world to-day, and possibly may have some direct connection with the prevalence of nervous diseases, melancholia, and insanity.

The feeling of drowsiness after a full meal will be admitted, I believe, by almost everyone to be a natural condition incidental to the proper conduct of digestion. If we grant this as a postulate, then we are forced to admit that the use of tobacco, or coffee, or tea, or whisky, to such an extent as to drive away this natural feeling must be an interference with the normal conditions. A continued interference with normal conditions cannot be regarded as beneficial.—Herald of Health.



## Diphtheria

A. STUTTAFORD, M.D.

#### Treatment to Meet an Emergency

This dreaded disease is becoming more and more prevalent and alarming every year. It is now met with frequently even in the rural districts of the Commonwealth, where conditions are favourable to maintain health and resist disease. In the crowded cities where it sometimes manifests itself in its most severe form, carrying off three out of every four which it attacks, it is also becoming far more common than formerly.

Its ravages are generally made upon the young—upon infants and children up to six years of age,—but the disease is by no means confined to those of tender years. If proper treatment is neglected, the outlook is very grave.

Bad hygienic surroundings are important factors in producing disease. Those living in the country have an advantage in this respect over those living in the cities, as country children may revel in the breeze and sunshine from morn till night; and it might be just to assume that the table in the country is, on the whole, more liberally supplied with healthful food than is the case with the masses who live in the cities.

#### A Cause Unnoticed

There is, we believe, one very frequent cause of this and similar troubles in children which is entirely overlooked, and we would earnestly urge parents to give this matter careful attention. We refer to the unsuitable clothing provided for children for their warmth and comfort. things are, the trunk is generally clad too warmly to the great distress of the child, while from the shoulders to the fingertips and from the groin or knees to the toes the limbs are left bare. In this way colds are contracted and those serious complications induced that usually attend colds if neglected.

#### Weather Sometimes Treacherous

In many parts of Australia the midwinter days are very pleasant and enjoyable, and quite equal to the warm summer weather of some countries in Europe. Where these conditions obtain, an abundance of clothing is not required. But in Australia the warm mid-days in winter are often followed by cold, frosty nights. the cold air being felt sometimes to within two hours of noon next day, and the temperature becoming cold again before the sun goes down. The clothing should therefore be adjusted to suit the great changes in the temperature as much as possible, always taking care to provide a free circulation and to maintain the warmth of the body, not only in winter but at any time when there is a sudden change from intense heat to extreme cold.

These principles apply not only to little children who suffer in silence, but also to grown people who may be in feeble health, in whom the neglect of these precautions may induce lung trouble or some serious complications that may not be easily removed. Little children are more likely to fail in health by these unwise exposures to changes of temperature through deficient clothing than they are to become hardened by them and grow robust, as some people affirm.

#### Be on the Alert

When the infant or little child shows signs of being unwell, or is restless, and has little or no desire to take food, has pain with the effort to swallow, or is at times feverish—it would be well to take a good look into its throat and see what can be discovered there. For this purpose let one person hold the child on the lap, its face towards the light, in such a manner that the sunshine may light up the back part of the throat. Then put one arm

around the child, draw it close to the side, and hold both its hands. Then let a second person with the handle of a dessert or tablespoon firmly press the tongue down and forwards. Now look for the uvula, something like the end of one's little finger, pointing down at the back part of the throat in the middle. Notice if there is a yellowish or gray substance firmly fastened to the flesh and appearing to rise on each side from a tonsil below, passing well upward, across to the centre, and then down again along the edge of the uvula, and uniting at the uvula's lower border. This description may be sufficient to give an idea of the appearance of the throat in many cases of diphtheria, so that the disease may be identified when present.

#### Secure Medical Help

If the child shows symptoms of diphtheria, the doctor should be sent for without delay, giving him the reasons for your apprehensions, that he may come prepared to inject serum and otherwise to treat the case intelligently. When this condition is reached, as indicated by the appearance of the throat, it means that the outlook is very serious.

For those who live at a great distance from a physician, or who may not be successful in securing his services at once after having spent hours to reach his surgery; and, perhaps, may not be within reasonable distance of a hospital where there is a staff of nurses specially trained to attend these cases, and to which the child could be taken, we will outline the treatment that with care can be safely carried out at home while waiting for the doctor.

#### In Your Extremity Follow This Plan

First of all get a few lemons—lemon juice is a real friend in an emergency like this, so is pineapple juice. Get a clean pine stick, a little longer than a penholder and bigger, a handful of absorbent cotton—clean cotton rags will do—an egg-cup, and a plate to put it on to catch the lemon juice if overturned, for it may be too precious to lose in the backblocks.

You will also require a tablespoon, a knife, a spittoon, a good fire, an enamel or crockery wash-basin to hold the disinfectant for the hands (which should consist of a teaspoonful of lysol to the basin of cold water).

Now round off the end of the pine stick, and fasten to it a piece of absorbent cotton, or clean cotton cloth, to make a round swab about the size of a small walnut. A notch should be cut on each side of the stick, say, nearly an inch from the end where the swab is to be tied. Now pass a clean string over the cotton so that the string might sink into the notches and prevent the cotton from coming off and going into the child's throat and choking it. After the first treatment it would be well to have six of these swabs in readiness. Three might be sufficient for a treatment. The doctor has an instrument for this purpose that would grip a wad of cotton or release it in a second.

If you have no good, fresh fruit to stew, or to make fruit-juice drinks, no blackberries, no oranges, mandarins, bananas, pineapples—that would be very unfortunate. Still, don't worry. You are pretty sure to have raisins, or can get them without much trouble, and they will be a great help under the circumstances. Extract the juice of these, as required, by boiling. So that with these, some rice or groats and a few arrowroot biscuits you can get along.

#### How to Isolate

While these little things are being got ready, find a suitable room that can be isolated from the rest of the house, in which to place the child until it is well again. Possibly you might find a suitable place at the end of a hall, where the other members of the family do not pass. If the weather is not cold at night, and the spot not exposed to a fierce sun by day, a corner of the verandah might be used for this purpose, provided it can be sheltered from storms of wind and rain. There is always the danger of contracting bronchitis, pneumonia, and other troubles as complications in this disease, and this

makes it necessary that the air breathed by the patient should be as far as possible of a warm, even temperature day and

night.

It would be well to provide for this emergency by placing a canopy on the cot, so that the child might breathe the steam from a boiling kettle placed beside the cot, but inside the canopy, if necessary.

The room or place chosen for the child should first be emptied of everything, and during the sickness nothing but a few simple and necessary articles should be placed in it. This will save labour and destruction of goods when the disinfecting is done later on. cot should be one that can be easily cleaned, with the canopy attached, but not necessarily drawn down for present use, as this would interfere with the supply of pure air which the patient needs. A single bed should be provided for the nurse. Two plain chairs and a small table for a dish of disinfectant should complete the necessary furniture. It is advisable that the dishes and cutlery required should not leave the room, but be washed after every meal in boiling water.

#### The Nurse and Assistant

The nurse should remain with the patient throughout the course of the dis-In the evening, as opportunity offers, she should disinfect herself, change her outer garments, and walk out for exercise in the fresh air without, if possible, coming in contact with others, or passing into other portions of the dwelling. She should have an assistant who would only require to come to the sickroom for a little while two or three times a day, to assist in bringing the meals and swabbing the throat chiefly. The assistant must be supplied with a sheet or gown to wear in the sick chamber. When she leaves this should be hung up outside the chamber on a peg after disinfecting the hands and brushing her hair.

#### Safeguards

A tub containing formalin solution (eight ounces of formalin to a gallon of water) must be kept near the sick room, and articles to be sent out of the room during the sickness should be put into this tub. Bed and body linen, and other articles which will not be injured by boiling, should be soaked in it, wrung out, and boiled immediately in water with soda added to it. Woollen and other goods which must not be boiled, should be soaked in the formalin solution for three hours, and then washed in the usual way.

#### How to Proceed with the Treatment in an Emergency

While waiting the arrival of the doctor, whose delay to reach a remote part might be quite excusable, you can now proceed with your treatment of the child's throat. Do your very best. Let both the nurse and attendant be kind, but firm, for the person's life may depend mainly on the faithful carrying out of the measures laid down for the purpose of removing the poisonous membrane attached to the back part of the throat.

Cut into halves one or two lemons, and press the juice into a teacup. From this cup half fill an egg-cup, stand the egg-cup on a plate, and set the teacup aside in a safe place, lest it may be capsized. Lemons may be too scarce to allow of any waste. Let the nurse be seated where she can get the best light well back into the child's throat. Close beside her put the table containing the plate and egg-cup of lemon juice, the swabs, and tablespoon. Have one swab well soaked in the lemon juicelaid on the plate with the egg-cup in readiness.

While the nurse holds the child firmly to her side in the light, with one arm around it, and with her hands holding the patient's feet and hands, let the attendant with the handle of the tablespoon press the tongue down and forwards quickly, and as soon as the tonsils are exposed, apply the swab smoothly in every direction.

Some of the exudate will adhere to the swab, some will pass down the throat, and some probably come out of the mouth into the spittoon. In many cases the child will commence to clear its throat at

once, and feel relieved. This should be repeated with two fresh swabs. Its mouth and face should then be wiped, and a teaspoonful of pure lemon juice given it, and the child put to bed to rest. The swabs must be placed in disinfectant, and the cotton removed and burnt. This will require to be done daily for a few days, until the membrane is removed.

The child's bowels should be kept open. It must be sponged under the blankets twice daily—morning and evening—with hot water, to open the pores of the skin and throw off poisonous material from the body.

#### Diet

The food at first should be light and nourishing, and given every three to four hours, with no food between meals. The following can be used to advantage: Rice, groats, gruels, buttermilk, milk, arrowroot biscuits. More solid food can be added as the child improves. Juicy pineapple is good, also fruit juices generally, and the juice of stewed raisins. Lemonade can be given freely to quench the thirst.

If conducted intelligently the patient may make good progress under this treatment in careful hands. If lemon juice or pineapple juice is not obtainable, persevere with plain, clean boiled water that has been cooled, and give the child raisins to chew afterwards. Don't give up! You may be successful with even these simple remedies.

But every effort should be made to obtain the services of a skilled physician, and that without delay. He has a very important work to do in the injection of serum, which would lessen the danger to the child, and make the passage through the disease with much less discomfort. He would also be ready to inject doses of serum in other members of the family, to lessen the risk of their taking the disease. But his services would take in much' more. He could also thoroughly instruct the nurse as to the treatment of the case during his absence, if he could not be in regular attendance, which would probably be the case in remote parts, and the infectious wards of a public hospital might also be too distant to be accessible to the patient.

#### How to Disinfect

When the case has progressed sufficiently, disinfecting of the room or the corner of the verandah that has been occupied must be done. The nurse is usually the best person to attend to this. The child must have a bath and a change of clothing, and then be carried into a warm sunny room that has been well aired. Inexpensive toys the child has used in the sick room had better be burned. Place tubs containing formalin solution against the wall of the room, and in these put all the goods that can be treated in this way without spoiling. From time to time stir the goods up, but leave the tubs till the fumigation is finished. Paste paper over places where the sulphur fumes would escape-fireplaces, around windows, and windowsashes-everywhere. Fasten as many lines as would be necessary across the room in pairs a foot apart, and on these arrange goods so that the sulphur fumes from the tubs below might freely penetrate every part.

Now the sulphur fumes would be in order. Get a tub-two tubs would be better, placed a distance apart. Pour some water into them, then place two bricks in each. On each two bricks place an iron vessel, say, a camp oven in one tub, and the cover of the camp oven in the other. Divide about one and a half pounds of sulphur between the two. This would be sufficient to fumigate 1,000 cubic feet of space. Add a little methylated spirits to the sulphur, and after seeing that everything is safe, set it alight, and get out quickly and close the door .of the room, and paste up the door and the keyhole if necessary.

Look in through the window occasionally and see if everything is progressing safely—the fumes filling the room and penetrating everywhere. Twelve to fifteen hours should be sufficient for effective fumigation. Then open the doors and windows, clear the lines and take them

down. Go around the walls and ceiling, if they are wood, with a cloth wet with the formalin solution. Most wallpapers should be removed, and the walls papered afresh. Mop the floor with the solution, and afterwards scrub it with hot water and soft soap.

#### Notify the Authorities

When this is done, the nearest health officer should be notified of the fact. He must also be notified immediately the disease is first discovered.

#### Indigestion

INDIGESTION is a trial that a great majority of the human race have to bear at some time or other. Infants are extremely subject to it, and the care of the digestion of the newborn has become a very important part of medicine. That care can be intelligently taken because babies are at the mercy of adults; their food can be analysed, and weighed, and measured, and doled out to them with an authority that few grown-up persons would submit to. When babies have become children, we do not hear so much about their digestions. If ordinary care and common sense are exercised, the digestion of most children will take care of itself, for the incessant physical activity of children keeps the digestive functions in a healthy state.

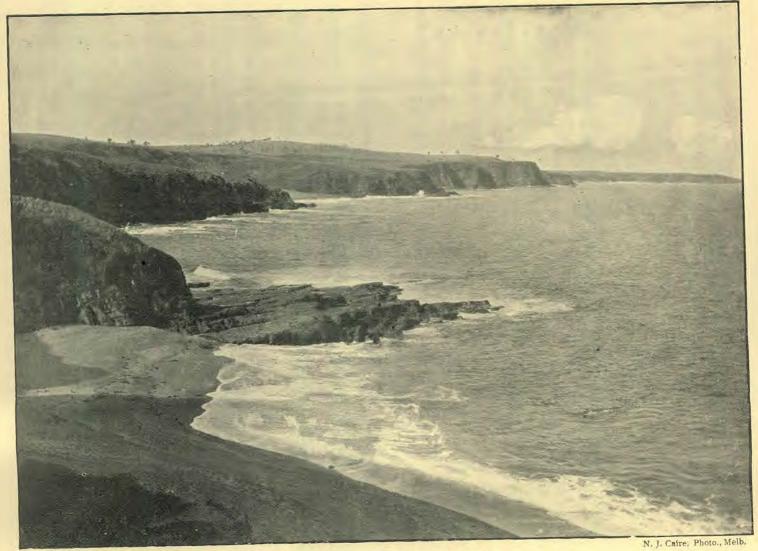
When an adult suffers from constant trouble with the digestive apparatus, it is necessary to discover the exact cause; otherwise the treatment may be misdirected. It is a good plan to chew thoroughly, for example, but chewing will not prevent indigestion if you are eating the wrong kind of food. If your digestive organs will not act on lobster, they will refuse small pieces as well as big ones.

Sometimes tight clothing—belts, corsets, or skirt bands—is the real cause of defective digestion. When that is so, it is no use to take digestive tablets. The organs have not enough room in which to do their work properly, and the tablets can give only temporary relief.

But no one need despair of his digestion until he has tried faithfully the expedients of an erect carriage of the body, the careful mastication of every mouthful of food, and the habit of deep breathing.

To those practices, which he must tollow regularly and persistently, he should add a system of exercises designed especially to aid digestion—that is to say, exercises that involve the trunk and the large abdominal muscles. The best results are attained by twisting and bending the body back and forth, and stooping over—especially by bending the body from the waist and touching the toes with the finger tips. As the most useful exercises of that kind can be practised without apparatus, they are within reach of everyone.—Youth's Companion.





SANDY BEACH, SAN REMO, VICTORIA



NOTICE TO SUBSCRIBERS: All questions for this department must be addressed to the EDITOR, "LIFE & HEALTH," WARBURTON, VICTORIA, and not to Dr. W. H. James, who will treat correspondence only on usual conditions of private practice. Subscribers sending questions should invariably give their full name and address, not for publication, but in order that the Editor may reply by personal letter if he so desires. Because of this omission several questions have not been answered. To avoid disappointment subscribers will please refrain from requesting replies to questions by mail.

#### 263. Vegetarian Diet

"Economy" asks, "Is vegetarian diet advisable from an economical standpoint?"

Ans.—The most healthful diet is certainly the most economical, and the most healthful diet would exclude all flesh foods. A healthful diet is a very simple diet, nature's products are quite sufficiently complicated without a further mingling in the kitchen. Our cereal products, which should form the main part of a healthful dietary, contain proteids, fats, carbohydrates, and mineral matter in most healthful proportions, but their mixture with milk, sugar, greasy substances, and eggs makes them not only expensive but difficult to digest and harmful to the system generally. These unhealthful mixtures are more difficult to digest and to assimilate than a simple meal of bread and flesh food, or bread, flesh food, and vegetables. Eggs are good, milk is good, and good butter is healthful, but mixtures of eggs, milk, butter, sugar, flour, and baking powders are certainly neither healthful nor economical. Food should be made as appetising as possible, but this can be done without making complicated dishes, and the waste of so much time in the kitchen. Nature would be kind to our women folk, but the acquired and depraved tastes of man make them slaves. Rich cakes, pastry, complicated vegetarian "roasts," and all

foods cooked with fat of any kind at a temperature above boiling point can have no place in a healthful dietary.

#### 264. Nervous Temperament

"La Patrie" writes: "Kindly tell me through your book this: My little girl will be ten years old next January. Whenever she is scolded she cries and gets blue in the face, and gasps for breath. She is very nervous. Kindly give the cause."

Ans.—These symptoms are quite compatible with a nervous temperament without any diseased condition of the system. Of course any heart trouble would make these symptoms more apparent, but when these symptoms exist apart from any disease, as is frequently the case, there is no reason for special anxiety.

#### 265. Tobacco Poisoning

"G.M." writes: "About four years ago my husband had a very bad attack with his nerves, which necessitated him taking five weeks' holiday. . . . He is thirty-seven years of age, very thin, and smokes a good deal—every draw is a drawback. His heart is so bad at times that he cannot lie anyway. . . . He frequently faints. His tongue often seems too big for his mouth when he wakes up of a morning. There is no inclination

for meals. . . . His legs ache, and he is too tired to walk about, and gets very melancholy at times and very irritable. I want you to tell me what state you think he is in, and if his heart is very bad. . . . The cigarettes (full strength Capstan) he smokes I know are injurious, and he knows it too."

Ans.—All the symptoms complained of are undoubtedly due to continued interference with the action of the nervous system, and the use of tobacco is unquestionably such an interference. Nature acts best without any artificial stimulants or narcotics. It may be asked why one person suffers from the use of tobacco so much more than others. Some constitutions are more robust; in some, hereditary weakness is less prominent; some indulge in other habits such as tea drinking, late hours, sexual excesses, and these all help with the tobacco in upsetting the action of the nervous system. All the symptoms complained of are symptoms of chronic tobacco poisoning, and abstinence is the only remedy. Meat diet undoubtedly increases the desire for tobacco as well as for alcohol and other stimulants. simple, healthful dietary is a great help in overcoming the desire for artificial stimulants and narcotics.

#### 266. Insomnia

"D.M.," Christchurch, writes: "I am twenty years of age, and for the last six years have suffered from sleeplessness. I have consulted doctors here, but with no result. When fourteen years old I contracted diphtheria, and it is to this severe illness that my friends trace the sleeplessness which I have never since been rid of. I usually have two or three wakeful nights running (one bad night invariably leads to another), then a night of very broken sleep, and after that two or three really good nights, and so on. I take no opiates of any kind. . . . I never go to evening entertainments, and am usually in bed by ten. . . . I should like to have an opinion as to whether this state of things is likely to continue after I am

twenty-one. I have been assured repeatedly that as the trouble commenced when I was fourteen, it will probably go after seven years. Does this ever occur, or is it only a superstition?"

Ans.-It must be remembered that insomnia is often due to auto-intoxication, to waste products in the blood, consequently the diet must be simple and easily digestible. Flesh foods leave much waste products in the blood, and should be avoided, especially with those following a sedentary occupation. The bowels should be kept regular and the skin in good order. Tea drinking is a very common cause of insomnia. The evening meal should be light, preferably some cereal food, such as granose or wheatmeal biscuits and fruit. In persons of sedentary occupation, lack of normal fatigue is the chief, if not the sole cause. In these cases brisk exercise to the point of moderate fatigue, taken just before retiring, will be helpful. Very frequently the worry about inability to sleep prevents sleep. Anxiety to sleep should be curbed as much as possible. A bath about 97° or 98° F. for half an hour just before bedtime will frequently induce sleep. The water should be cooled three or four degrees before getting out of the bath. A neutral bath should not be taken unless the feet are warm, or if there is any chilliness. A hot foot bath, by drawing the blood from the nerve centres, is an aid to sleep. Frequently a hot bath followed by a cold shower will produce the desired result. Three hot fomentations to the spine followed by light rub to the spine or to the body generally often prove serviceable. The moist abdominal girdle, worn all night, lessens congestion of nerve centres, and induces sleep; if this does not produce a sense of comfort, it must be removed. To apply the abdominal girdle, moisten in cold water a doubled piece of surgeon's lint of sufficient size to cover the abdomen, or a small towel; cover first with oiled silk, and then with cotton wool or flannel, and bandage.

The parts should be sponged with cold water on removal in the morning.

We hear a good deal about special changes taking place in the human system every seven years, but we know of no facts to substantiate these statements. The periods of seven found in nature, however, are very remarkable; for instance, the pigeon hatches its eggs in exactly two weeks, the fowl in three weeks, the duck in four weeks, the goose in five weeks, the ostrich in seven weeks. In diseases the symptoms have weekly variations; in fact, the seven periods are remarkable right throughout the animal kingdom.

#### 267. Throbbing in the Ears

"Puzzled" writes: "I am troubled with a peculiar throbbing in the ears at night when lying on the pillow. It consists of a regular beating or reverberation which never occurs at any other time, and ceases when the ear is raised from the pillow. I have tried syringing the ears, but do not think they are affected. My hearing is very good, and there are no symptoms of disease of any kind. The trouble is overcome by lying on the back or using two pillows side by side but slightly apart, so that the ear occupies the space between them, but for the sake of good health I should like to know the cause and remedy. I am generally healthy, strictly temperate, and follow good health principles generally."

Ans.—This throbbing is caused by the pulsation of the internal carotid artery in the ear bone. Normally the pulsations of the heart transmitted through the artery are not felt any more than one in health feels the throbbing of the heart itself. Generally the "throbbing" comes and goes, and is due, not to any disease, but to a special sensitiveness of the nerves. "Puzzled" need not feel the least alarm in reference to this symptom, as it is compatible with perfect health. A light evening meal and freedom from all excitement toward the close of the day would

probably help to dissipate the symptom. Tea drinking and all nerve irritants should be avoided.

#### 268. Grey Hair

"Dark-haired girl" writes that her hair "is going grey without any apparent cause. My general health appears to be good. . . . The roots particularly are white, the ends of the hair being either the natural colour or faded looking, and some are white entirely. I am twenty-one years of age."

Ans.—The colouring matter in the hair is secreted by the hair papillae, hence the grey colour always appears at the roots. Dr. Kellogg states that "there is no remedy but dyeing." But the ordinary hair dyes often contain lead or other poisonous substances, and consequently cannot be recommended. Prof. Hager recommends a perfectly safe dye as follows: "Subnitrate of bismuth, one ounce; glycerine, fifteen ounces. Heat together in a water bath for an hour. Add carefully a strong solution of caustic potash, while stirring the solution, until it becomes Then add a very strong solution of citric acid until the test paper (litmus) shows the mixture to be nearly neutral. Add sufficient rose or orange flower water to make two pints. Colour slightly with aniline, as desired."

#### 269. Apparitions at Night

"West Warburton" writes: "I am much distressed by apparitions appearing to me at night, generally strangers, sometimes members of my own family, always close to my bed. If the room is dark still I see them. The last was a little girl with a vase of flowers in her hand. My age is eighty-six years."

Ans.—This is more a psychological than a medical subject. Like dreams, apparitions are in most cases due to the mind not being fully asleep. There is more blood in the brain than usual during the sleeping hours. Probably there are

other factors which cannot be discussed here. Maudsley in his "Physiology of the Mind," pp. 292-297, takes the subject up fully. In order to give the brain as much rest as possible, we would recommend a very light evening meal, abstinence from flesh foods, tea, coffee, and stimulants generally. A hot sponge on retiring would probably be helpful.

#### 270. Eczema

"Subscriber" writes: "I wish to ask your advice re the best diet for scaly eczema. . . It is always more troublesome when the weather is warm. I am also troubled very much with flatulence. . . . Almost any food gives me flatulence. Anything in the way of vegetables gives me a bad attack, even green peas. Milk foods or eggs agree better with me."

Ans.—There can be no objection to milk foods and eggs in eczema. Milk should be sterilised (unless certain of healthful source), but not brought to the boiling point. Eggs are better raw, or cooked below boiling point. Hard-boiled eggs and eggs fried in fat are decidedly indigestible. Subscriber should take largely of dry cereal food with each meal, such as zwieback, rusks, granose biscuits, wheatmeal or oatmeal biscuits, cold crisp Thoroughly masticate all food. Do not drink with meals or for two hours after meals. Fruit is preferable to vegetables, and fresh fruits to stewed fruits. Fruits tend to give the blood a normal alkalinity, and thus lessens its irritating action on the skin. Vegetables are good if they do not cause flatulence, but fruit and vegetables should not be taken at the same meal. Avoid complicated and mixed dishes. Celery and lettuce would probably agree with the digestion. We would advise the following ointment to be used at night:—

R. Ung Zinc Oxidum
Ung Hydrag
Ung Plumbi Subac

ši (one ounce)

#### 271. Paraffine Oil

"Mrs. W. S." writes from Queensland that her husband suffers from dyspepsia and constipation, and wishes to know where she can procure paraffine oil.

Ans.—Liquid paraffine or paraffine oil can be obtained from any respectable chemist. One to two teaspoonfuls should be taken regularly night and morning for some weeks. We would also recommend diet as given under "Eczema."

#### 272. Appendicitis

"M.G.D." writes: "I have had appendicitis for some years, not feeling it all the time, but coming on every little while. For a number of years I never saw a doctor or had any treatment. Have had some sanitarium treatment, but have never stayed longer than three weeks or a month at a time. Would you advise an operation?"

Ans.—Our experience is that proper dieting through a prolonged period will dissipate all symptoms of appendicitis. Where proper dieting cannot be carried out for a long period, we would have no hesitation in recommending an operation. We believe the appendix at one time in man's history had important functions, but that those functions have been largely lost, and that the removal of the appendix under skilful hands is only followed by favourable results.









## How to Keep Cool in Hot Weather

DAVID PAULSON, M.D.

To keep comfortably cool when it is excessively hot is a live problem that confronts us during these summer months. How can the list of heat prostrations be avoided?

God has endowed man with wonderful powers of adaptation to climatic changes. He cannot only adjust himself to the awful cold of the Arctic region, but also to the excessive, scorching heat of the tropical jungles. Then why should so many be overcome by a little more than ordinary summer temperatures?

#### Alcohol Ruins Heat Regulation

A large number of heat prostrations occur among the intemperate. Alcohol not only paralyses the most delicate nerves, whose mission is to notify us of physical discomfort, thus permitting us to imagine we are comfortable when we are really miserable, but what is vastly more important, it also throws that wonderful heat-regulating mechanism out of gear so that it does not operate satisfactorily. Hence heat, instead of being normally eliminated, accumulates within, and soon overwhelms the brain and nervous system. thus producing what we call "heat stroke.

#### Regulate the Inside Climate

We are gradually beginning to discover that the kind of a climate that we are generating within has more to do with heat prostration than the outside climate. The body does not need as much fuel in summer as in winter. But there are many who eat a more hearty meal in midsummer than they do in midwinter.

The body may be educated to actually demand five solid meals a day, and many people are guided in their eating by habit rather than by principle. They imagine that they are satisfying bodily hunger when they are only gratifying a habit hunger.

There is such a thing as supplying the human furnace too fiercely, and there are certain foods that particularly tend in this direction. Dr. Hindehede, the great Danish dietetic authority, says: "I will not deny that after eating a large beefsteak there may be a feeling of bodily warmth. Meat is able to increase combustion, but this feeling is not energy. After such a dinner there is more inclination for sleep than for hard work. Meat is a fierce-burning fuel; but it seems to burn out the oven itself in the long run."

#### Foods that Taste Hot When They Are Cold

More than two hundred years ago a quaint English physician wrote that a hot regimen such as tobacco, tea, coffee, wine, brandy, spirits and spices, was unnatural to English bodies. That statement is just as true to-day. Such substances are doubly unnatural during the heated season. It is a ridiculous mistake to eat mustard plasters in the summer time.

I was walking down Wabash Avenue, Chicago, one very cold winter night, when an Italian street vendor said, "Mister, Mister, buy one of my Mexican tamales!" To those who know nothing about the fiery character of tamales it is sufficient to say that like Nebuchadnezzar's furnace they are seven times hotter than any other known eatable. As I did not seem interested, in order to impress me still more profoundly he said, "Mister, if you eat one of my tamales you will not need to wear your overcoat." Now the kind of food that will enable one to dispense with an overcoat in January will be very likely to pave the way for a heat stroke in July.

The Chicago Health department issued a bulletin giving the following sensible hot weather dietetic suggestions: "Be temperate in all things. Drink water, not beer. Far more important than anything else, eat lightly; cut your usual winter rations in half. Eat soups, vegetables, and buttermilk. Avoid particularly meats, butter and heavy soups of all sorts. Drink plenty of water, no wines. Keep your bowels open, your stomach empty, your skin clear, and you will avoid sunstroke."

#### A Hot Weather Tradition

We often hear the remark made, "I am so hot, I want to go in and get some ice cream to cool myself off." But ice cream instead of cooling actually rouses the heat-making functions to manufacture more heat, so that in reality it warms up instead of cooling off.

In addition to this objection, ice cream is very likely to contain death-dealing germs. Recently the Chicago newspapers reported two hundred and eighty cases of toxic poisoning due to eating ice cream, in a little town not more than fifty miles away. There were so many bacteria in this ice cream that it had to be diluted a million times before a small enough number could be placed under the microscope to count successfully. The Chicago Board of Health found ice cream sold in

that city, last year, containing as many as six million germs in less than half a thimbleful of ice cream.

When ice cream is made from clean milk and cream, it will of course not swarm with these germs. But it is possible to work into ice cream milk products that are literally filthy swill, and yet when it has been frozen and skilfully flavoured it is impossible to detect it by the taste.

#### The Soft Drink Habit

During the summer a small ocean of ice cream sodas and other soft drinks is consumed by our thirsty population. Carbonated water itself is a perfectly wholesome and hygienic drink; but in nearly all the cheaper places the fruit syrups that are added are coloured with anilin dye, and are generally preserved by benzoic acid and other chemical preservatives that are harmful to digestion.

Furthermore the glasses are frequently rinsed in the same water from morning till night. No one would tolerate such a filthy arrangement in their own home.

The increased thirst during hot weather is a physiological requirement, and should not only be gratified but encouraged. It should not be quenched with such drugdrinks as tea and coffee, which contain caffeine, which helps to disarrange the heat-regulating mechanism, and thus makes the nervous system more unable to endure heat.

Fruit juices are almost as inexpensive and much more suitable, although there is no better beverage than pure water, which should be drunk in abundance.

The diet during the summer should consist of dairy products in moderation, well-cooked cereals, the luscious fruits either raw or cooked, and the cooling vegetables, particularly green garden produce, which introduce valuable mineral salts into the system and at the sametime furnish sufficient bulk to stimulate the activity of the alimentary canal. Those who subsist upon such foods, and who take particular pains that there shall

be no stagnation of the bowel contents, will be almost certain to avoid heat stroke no matter how hot the weather may be.

#### Tainted Foods

Fresh game, and even ordinary fresh meat, can only be exposed a short time to the prevailing high temperatures before decomposition begins to set in. This is particularly true of fish.

On this point Gouraud, the eminent French dietetic authority, says: "Unfor-



An Ideal Sleeping Place

tunately in fish putrefaction sets in with an incredible rapidity, quite unknown in other articles of food. In the summer time it requires but a few hours. The packing in ice is only a palliative, which frequently serves merely to mask the odour. In the summer months it is, practically speaking, well-nigh impossible to obtain fresh salt-water fish anywhere, except at the seaside itself. The danger is the greater, because the odour betrays putrefaction only in its advanced, not in its early stages."

Bread, rice, apples, carrots, do not decompose and form virulent poisons in this manner. Why should we from choice eat foods that become tainted by only a few hours' exposure to a summer climate, when we have an abundance of foods that can endure the same temperatures for days without any danger? If apple sauce spoils, what has happened? Only a little acetic acid has formed, which is the technical name for vinegar; and this, as everybody knows, is not a virulent poison. But when meat putrefies deadly ptomains are formed which are likely to destroy human life in a few hours.

#### The Pestilential Fly

The fly is more than a nuisance. He is a death-dealing curse. He loves dirt, and is constantly bathing his feet in filth. And it is one of his mischievous tricks to wipe his dirty, germ-laden feet on the very food that others must eat.

During the Spanish-American war it is estimated that fly diseases killed nearly ten times as many soldiers as the Spanish bullets.

Very often vegetables are left unscreened, exposed to thousands of flies in the market places. When there is the least suspicion of this it is well to dip them for a moment in boiling water to destroy the germs. They can immediately be dipped into ice cold water, thus practically returning them to their native freshness.

#### What to do for Heat Stroke

The first thing to do is to wrap the head in towels wrung out of ice cold water. Second, put the feet in hot water to relieve the congested brain and nerve centres. Third, rub the body vigorously with cold water, with the view of bringing the blood to the surface to relieve the internal congested areas. Last, but not least, give a good, thorough enema to clear out the bowels. The great need for this is sometimes the principal cause of the heat stroke. If there are no facilities

at hand for colon flushing give a liberal dose of salts.

To sum up: cool the head, rub the skin, and empty the bowels, and the chances are that in a few hours the heat-prostration patient will be as well as ever, and will suffer no permanent injury from this unfortunate experience.

#### How to Have Spring Weather in Summer

A few years ago I had under my care a patient who had previously had a heat

stroke, and who suffered intensely during excessively hot weather. One day when the mercury was climbing up to a dizzy height she sent for me and said, "Oh, I wish I were home to-day; I am so afraid I am going to have a spell." I innocently inquired if she thought it was any cooler at home.

"Oh, no, but you know if anyone is to have something awful happen to them they prefer to be at home."

I asked her if she would not enjoy some delightful spring weather. She assured me she certainly would, so I told the nurse to take her down stairs and give her a liberal dose of spring weather. The patient looked at me as if she thought I was trying to make light of her anxiety; but the nurse understood.

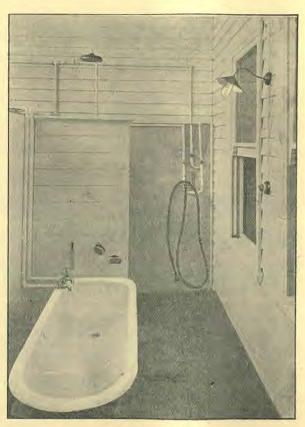
She was put in a bath that felt as comfortable as a spring morning. Her dinner was served on a tray placed on a board across the bathtub; in other words, she took her dinner on water.

In the middle of the afternoon a cool breeze set in, and she was taken back to her room. When I saw her a little later she was all smiles, and remarked that it had been the best day she had spent in the institution. She said the provoking thing of it all was that it had never occurred to her to get into her own bath-tub at home to cool off when she suffered from these heat spells.

It is a splendid idea to start out the hot summer day with a cool sponge bath. This is refreshing and exhilarating and will encourage the skin to eliminate the heat more satisfactorily, and will make the entire day much more endurable.

#### Catch the Outdoor Habit

During summer time it is a capital idea to catch the outdoor sleeping habit. But with a few pennies' worth of mosquito netting, screen in your verandah, and



Commence the Day in the Bathroom

transform it into a bedroom. You will discover how much more satisfactory it is to sleep out-of-doors than indoors.

It is also a splendid thing for the housewife to learn that she can peel potatoes out on the verandah just as well as in the hot, stuffy kitchen. With only a trifle more exertion the dinner table can

often be placed out under one of the trees and thus have a picnic at home.

The more we can learn how to work outdoors, prepare food outdoors, write letters and visit outdoors, sleep outdoors, the more thoroughly we shall enjoy the summer months.

God put our first parents in the garden.

Their descendants have paid dearly in a thousand different ways for leaving the garden and moving indoors. There is a strong tendency in these days to move back to the garden. Adopting this programme means increased health, greater efficiency, actual uplift, and genuine enjoyment.

## A Girl's Ideals of Womanhood

A Talk to Girls

**EULALIA RICHARDS** 

THERE is nothing more beautiful in all God's world than a pure, sweet, happy girl.

And yet perhaps each of you has wished at some time or other that you were a boy instead of a girl. You may have thought of manhood as affording a greater degree of liberty—a broader, higher life; but this is not true in this Christian land of ours. There are the most glorious possibilities in womanhood if only we may perceive them and attain unto them.

A true woman may purify and sweeten all of the atmosphere in which she moves. No matter how menial her duties, the noble spirit she brings to her work lifts it far above the low plane of common things. Her brave, joyous life sheds a radiance over all around her. Only good words may be spoken within her hearing, and only noble deeds enacted in her presence. Her friends are inspired to higher and nobler living through association with her. And then to womanhood is granted the most glorious privilege of all, that of giving birth to and rearing the men and women of to-morrow, of moulding characters for eternity.

It is well for us to sometimes pause and examine our own hearts. Are we cherishing high ideals of womanhood? Do we take ourselves in earnest as the daughters of God with the most glorious possibilities before us? Do we sense the responsibility which such privileges entail? A girl who has no noble ideals, no lofty standard of living, is like a little barque without helm or oar, tossed about on the cruel sea. We need the strength and inspiration which come from a firm and noble purpose in life, but if we are to avoid making shipwreck in the darkness, we need more than all else the help of Him who not only lighteth but guideth every man that cometh into the world.

But some young girl asks, Surely you would not wish us young girls to have such serious and solemn thoughts of the future? Yes, why not? We certainly would not desire to see an old head on pretty, girlish shoulders, but we do believe that in each girl's heart there should be enshrined a noble ideal of womanhood, an ideal which will serve as a guiding star through early girlhood days, and the strength of which shall keep her from any course of conduct which might mar her future happiness or prevent the realisation of her ideal.

Many a young girl has made shipwreck because of a degraded idea of womanhood or because of a thoughtless absence of ideas. Many a girl has sacrificed her purity and virtue before she had come to sense the untold worth of the treasure she held.

It is because of the many hidden rocks which threaten her little craft that every girl needs to consider her future course. The fair harbour which she wishes to reach should be a noble, shall we say a

perfect, womanhood. In order to make a safe voyage she must learn to know herself and the possibilities within her. She must know the dangers which beset her,

and she must learn how to steer clear of them.

We have said that the girl's ideal should be a noble womanhood. We believe that almost every girl who in her thoughtful moments considers her relation to this ideal, will think of herself as a wife and mother. She may not acknowledge it, but down deep in her heart lies hidden the hope that she may one day be an honoured wife and feel the pressure of a wee head upon her breast, and the clasp of tiny arms about her neck. And it is right that this should be so, for certainly God's ideal for woman is wifehood and motherhood, and in the discharge of these sacred duties lie the most wondrous possibilities.

God has not only endowed His children with His own life, but He has made it possible for them to co-operate with Him in bringing new lives into the world. But it is only as they follow His plan for them that they may attain unto the highest manhood and womanhood.

We believe that, at some time or other, there is in the heart of every good man a desire to win the love of some pure woman, and not only to win her,

but to wed her. There is also in the heart of almost every virtuous maiden a hope, however secretly cherished, that she may one day be sought in marriage by an honourable and worthy man. These instincts are implanted in the heart by God Himself for the purpose of effecting His ideal plan for men and women. And not only is the desire to find a mate God-



"A true woman may purify and sweeten all of the atmosphere in which she moves."

given, but also the attractions of person and character which draw two persons together. Every step in God's plan is pure and holy, the attraction between a good man and a virtuous woman, the development of a pure affection, the marriage ceremony, which to the world is the bond uniting the two lives, and finally that intimate physical relationship, or union, which seems but an outward sign of a deeper heart union. The child born thus in holy wedlock becomes a badge, or token, of the true love of a good man for a pure and virtuous woman.

But someone asks, Are not these ideals high?—Yes they are high, but are they too high for the Christian man or woman? In these days when sin and immorality abound, we need to return to God's ideals for us, holding fast to Him lest we slip into loose ways of thinking and living.

The young girl who knows these things will better understand the new emotions which stir within her breast as she crosses the threshold of womanhood. It is during these days of budding womanhood that the maiden needs to hold on to herself. Ah, yes, and she needs someone else to hold on to her, too. She needs the wise counsel and guidance of a loving mother, or of some mature and trustworthy woman friend. She needs to learn to hold her affection as a sacred trust, not bestowing it lightly upon this one or that, but guarding it sacredly until such time as with mature judgment she may bestow the wealth of her love upon the one true man who is worthy of her gift.

Sensing the solemn responsibilities of marriage, and the lifelong consequences of an unsuitable union, she will choose her friends with the greatest care. She will indulge in no preliminary flirtation.

She will boast of no broken engagements. She will not intrust her life's happiness to one who has "sown his wild oats," or whose past record has been questioned. She will require that the man who seeks her hand in marriage, who aspires to be the father of her children, shall be as clean and pure in life as she.

The young woman who values herself thus highly will scorn to court the notice of any man. She will not cheapen herself by permitting young men to treat her familiarly, or to take any liberties with her. She will be a good friend and comrade to such young men as are worthy of her friendship, but she will allow no one to overstep the bounds of womanly reserve which she has erected about herself as a safeguard to her purity. She will at once resent any vulgar word spoken in her presence. She will check the first approach to undue familiarity.

As an additional safeguard to her purity, the young woman of high ideals will read only good and ennobling books, wasting no time on books which give one false ideals of life and incline one to lowerher standards of thinking and living. She will dress with neatness and modesty, avoiding such styles as attract unduenotice to herself. She will conduct herself quietly and with becoming dignity in all public places, carefully avoiding speaking to or accepting attention or services from either strange men or women.

In short, she will so carefully guard herself and her virtue that nothing shall be permitted to mar her womanhood or to hinder her in the accomplishment of her God-given work in the world.





### **Outdoor Exercises For Women**

LAURETTA KRESS, M.D.

XERCISE is as important for women as for men. Every muscle, in order to maintain its best condition, must have exercise, by which the free exchange of blood is hastened. This movement of muscle, or elongation and contraction, acts upon the tissue the same as filling a sponge with water and squeezing it out again. Each contraction squeezes upon the blood-vessels, causing them to empty, each elongation or relaxation causing an inflow of blood. This carries out of the muscle all debris, and keeps up a healthy tone. . All muscles need the same treatment. Certain groups we use sufficiently, others have no exercise, and consequently are handicapped.

Many women have for so long accustomed themselves to few exercises that the larger group of muscles do not become developed as they should. It is unusual to find a woman with well-developed arm muscles. A piano player develops the muscles of the forearm; but the biceps and triceps, the large muscles of the arm, do not become developed as they should. Trunk muscles in civilised women are not used to advantage on account of the bands around the waist. Corsets and tight clothing hinder the proper use of the

trunk muscles..

We find for this reason many women with very flabby abdominal muscles, so that the internal organs, because of lack of support, are likely to fall down, or prolapse.

There are many forms of exercise in

which women can engage with great bene-Gymnastic exercises, under most circumstances, are very valuable, but the out-of-door exercises are much better because of the fresh air taken into the lungs, and because they are useful exercises. One feels when the exercise is over that one has accomplished something. I think of gardening, especially hoeing, as a delightful exercise. It is not a heavy one, and is very healthful. Any woman can engage in this useful exercise in her own garden. One hour a day, or even onehalf hour, will keep the garden in good condition, and will afford an excellent chance for the development of the muscles of the arms and trunk.

I remember with interest a patient who, though she was developing tuberculosis, was determined to live. She put on a pair of strong shoes and a short skirt, and hoed in her large garden each morning until the sun was too hot. This exercise morning by morning had the effect of restoring the appetite and increasing elimination through the skin and lungs. The cough ceased, she gained in flesh, and today, after seventeen years, she is strong and healthy. There is something particularly interesting in hoeing, for one is working over plants which so readily respond to care. If one's own merry heart produces a song to go with the work, the exercise is improved.

Another useful and healthful exercise for women is mowing the lawn with a lawn-mower: a fourteen or sixteen inch size is easily managed, and is not too heavy for the ordinary woman to push. This, too, is an exercise she can take early in the morning. An hour occupied in this way is well spent. It obviates the expense of hiring the work done, and it adds much to our lady's health.

Rowing is a very pleasurable exercise, and when the technique of rowing is properly acquired, it is one of the most beneficial of exercises. The general movement of the arm and back muscles, together with the muscles of the thighs.

medical course, I averaged six miles every day, and frequently took a longer walk than that. English women have practised this exercise to great advantage for years.

Our present easy and rapid modes of travel spoil us, so that walking exercises are not so popular as they once were. An energetic walk exercises nearly every muscle of the body. When the head is erect, and the body in good poise so that the weight does not come down too hard on the heels, thus jarring the spine, walking becomes an exercise that cannot be

excelled in its benefits for all.

Walking is a healthful exercise under nearly all circumstances. Of course it would not be healthful to walk in the evening along a marsh infested with malarial mosquitoes, nor would it be an advantage to take a walk in an atmosphere polluted with various impurities, nor walk in the sunshine unprotected on one of our hot summer days; but given a moderate temperature and a

fairly pure atmosphere, if one walks energetically with erect head and springy step, on balls of feet rather than heels, and with a mind full of courage and good cheer, the walk cannot but have a wonderfully invigorating effect.



"Rowing is a Very Pleasant Exercise"

makes it an excellent exercise. I have seen women become experts with oars, and develop splendid muscles by the exercise.

Swimming must be mentioned here also. Every woman should learn to swim, not only for the exercise she may gain from it, but because sometime the ability to swim may save a life.

I have not mentioned walking as a means of health getting. Among certain classes of women walking clubs are being organised. A walk of from three to five miles is taken regularly, and very often much longer ones. When taking my

FLIES dislike the smell of oil of lavender. A few drops on a bit of cloth, placed in a saucer of boiling water, will drive them away. Dip a cloth in boiling water, add a few drops of oil of lavender, and hang same on outside of screen door at point where they collect.—Selected.

#### THE SKYLARK

By Ernest A. Robinson

Thou sweet voiced bird that from the vault Of heaven pourest forth thy song As if thou findest not a fault, But love and laughter all day long.

Does instinct never urge thee forth, And to the homeland bid thee fly? Or are thy mem'ries of the north All banished by our sunny sky?

As when Pan his pipe did lend To teach the shepherds minstrelsy, Or fairy music now descend Thy softened notes of melody.

In prose and verse thy praises oft By England's poets have been sung. Oft have their eyes been raised aloft, Their ears to keen attention strung.

In echoes faint, yet soft and sweet,
To us thy song have they transferred.
Now in our fields thy form we greet,
By thy sweet notes our hearts are stirred.

They help us learn that deepest joy
In pomp or wealth is never found.
With nature's pleasures no alloy
Is mixed, but simple joys abound.

#### A Mother's Experience

Wherever possible I bring home the naughtiness of any particular misdeed. I make the punishment fit the crime. For instance, if Edgar persistently dried half-washed hands on a clean towel I made him wash that towel out himself, and wash it clean. If Anita chose to scramble over fences and tear her clothes I made her mend them herself. If either of the children interrupted conversation, their father and I made a point of interrupting the interrupter and pointing out why we did so—until the lesson was well learned.

It sometimes seems to me that if I had used a little less conscience and a little more head I would have avoided so many needless mistakes in my training of my children. I was so anxious, so pains-taking, and so foolish. For instance, it was my earnest desire that my children should be truthful and straightforward. I wanted them to feel that a lie was a lie, whether a mere evasion, an unworthy shuffling, or a lie of the kind miscalled "white." I wanted them to feel that their word was

binding; that if they promised a thing that promise was to be fulfilled in the spirit as well as in the letter. I wanted to be absolutely sure of their obedience to my behests.

Unfortunately I went quite the wrong way about trying to instil these principles into my dear little youngsters. And the mistake I made was in watching them too closely; in guarding too anxiously against the possibility of their deceiving me. And this, as I can now well see, simply put things into their heads.

For instance, one of our spaniels was the possessor of six tiny puppies. husband wished to keep the little things from being handled, so I called Edgar, Anita, and Maisie, and told them that I did not wish them to go to the stable until I gave them permission. I did not tell them why, because I believed that children should learn unquestioning obedience. And I added: "If any of you disobey me I shall be very angry." Now that was a false start. I should not have even suggested the possibility of their disobeying me. And I made matters worse by asking each night: "Did any of you go near the stable to-day? mother the truth!"

Could anything have been worse? I not only showed them I half expected them to disobey me, but also felt it extremely probable that they might lie to me as well! And, as might have been expected, I discovered one day that Edgar had disobeyed me and lied about it, while Anita had behaved like a little sneak and "told."

This matter of "telling tales" was but another outcome of my ridiculous method. For in my very anxiety to guard them with the utmost care I believed it part of my duty to find out whether or not I had been obeyed. And the process of finding out usually meant the more or less direct questioning either of one or of the other. In cases where both were implicated the one who "confessed" was allowed to go without punishment. In other words, I put a premium on sneaking and telling tales.

Different children of course must be dealt with differently: in one case implicit trust may be the only safe method to follow; in another a certain amount of espoinage may be absolutely necessary. But the mistake I made was in mixing the two methods too obviously. I told my children I trusted them, and immediately afterward let them see that I really did nothing of the sort. I placed them on their honour, and then made it perfectly apparent that I did not think their honour amounted to much. I quite overlooked the fact that diplomacy is a necessary attribute to successful parenthood.-Ladies' Home Journal.

#### The Baby's Cold

THE mother should do all in her power to prevent the baby from catching cold. Since we know that colds are catching, and will travel from one member of the household to another, the baby should not be allowed to come near any one suffering from this malady. If the mother herself has a cold, she should be careful not to give it to the baby. If a nurse is employed, she should be dismissed, if she has a cold, until after she has recovered. By avoiding a cold in the infant, many after complications will be avoided.

We look upon a cold too often as a simple, harmless thing. We take this too much for granted; as many a serious or fatal illness is the result of a cold. Infants that are strong and robust stand the invasion of a cold fairly well, as far as we are able to see, beyond a few restless days and nights. But the more unfortunate infant, who is just able to hold his own, may be made fatally ill by the extra demand placed upon his already burdened system.

Once the baby has caught cold, it is best to feed him more lightly for a few days. See that the bowels are kept open once or twice a day by enemas. The annoyance caused by the closing up of the nostrils, thus interfering with breathing and nursing, can be relieved by dropping

into each nostril a couple of drops of an oily solution made up of two grains of menthol and two grains of camphor to the ounce of albolene or white liquid petroleum every two or three hours. Plenty of water should be given between the feeding periods. These simple directions, if followed out carefully and faithfully, will save many an hour of worry.—The Herald of Health.

#### "Smile and 'Splain"

"How in the world do you get your children to act so quickly?" inquired a friend who had just dropped in, as she watched the busy, bustling youngsters of her neighbour as they were setting the table for their mother. "My children just 'dream' over everything I give them to do; it makes me fairly tear my hair with desperation sometimes."

"Yes, isn't it terrible the way a child can dawdle? Mine used to be fairly maddening." The mother smiled reminiscently. "I think I made them numb with my continual 'Hurry!' 'Now hurry up!' 'Oh, don't be so slow!' One morning that littlest one looked up plaintively from her shoe-buttoning and said, 'Mother, when I get a little girl I am not going to tell her "Hurry! Hurry! Hurry!" all the time.'

"Of course I laughed, and, still laughing, asked: 'When you get two little girls and two little boys, and have to get them all up and dressed in the morning, and put up their school lunches, and get their breakfasts ready so they will be in time for school, and then wash the dishes and get to the dressmaker's at ten o'clock, what will you do if those boys and girls just won't help a bit?'

"To my surprise she began to button as if her life depended on it. 'Why, mother,' she answered, 'I would just smile and 'splain.'

"That gave me an idea. Instead of telling them to hurry until my words were absolutely meaningless I have smiled and 'splained' and given them the feeling of being busy and having lots to do. It works pretty well, and we are all much happier. 'Smile and 'splain' would be a good motto in any home."—Selected.

#### Suggestions Worth While

DAMPEN a clean felt blackboard eraser with kerosene. Wash your gas stove, and then, when it is dry, rub over with the eraser. I have been doing this for two years, during which time my stove has never needed blackening; and it still looks like new.

Campers will never suffer the inconvenience of having their matches refuse to light if before setting out they dip them in very hot paraffin. As soon as they are cool, the matches are ready for use and are absolutely damp-proof.

Muslins and cotton goods can be rendered almost fireproof if an ounce of alum or sal aminoniac is put in the last water in which they are rinsed or in the starch when they are stiffened. This is a particularly wise precaution to take with children's clothes, for even if the clothes do manage to take fire—which is highly improbable—they will burn without flame.

Japanese lanterns may be used on the porch in the summer more safely and satisfactorily if a little earth or sand is put in the bottom of each. This, by adding to the weight, steadies the lantern, even when the wind is blowing, holds the candle firmly in place, and in case the latter should tip over, removes the danger of fire.

Living in a town where there is a great deal of lime in the water, and knowing that sand soap and "gritty" powders are bad for porcelain bowls or bathtubs, I use kerosene for such cleaning. This does the work satisfactorily; but it always left an unpleasant odour until I began to mix in oil of lavender and vinegar. I use about twelve drops of the lavender and two tablespoonfuls of vinegar to a pint of kerosene. The only odour that remains after cleaning now is a fresh and invigorating one.—Good Housekeeping.

#### **Choosing Employees**

"How do you pick out your stenographers, by their clothes or by their looks?" asked the sales manager of the correspondence man.

"By neither. Just by their hands. I look at those much more carefully than I do at their faces. A combination of rings and ink stains or of rings and carelessly kept nails means that the girl cannot have the job.

"It is simple enough when you come to think of it. The girl who takes pains to keep her hands immaculate and her nails trimmed will turn out letters that are just as carefully neat. If she has a white, clean, well-kept hand she will be a good employee; and you are welcome to the information. It took me some years to discover it for myself. How do you pick out your salesmen?"

"Not by their hands," laughed the sales manager, "but by another physical characteristic. I pick them out by their mouths.

"Every man who applies has recommendations. I never read them. If a man's jaws close with a snap when he talks, that man has opinions that are strong and can put up a good argument. He will put up a good argument with our customers, and a convincing one.

"On the other hand, if he closes his mouth loosely or his jaws wabble when he finishes a sentence, he will put up a lame and uncertain line of argument with an obstinate customer, and obstinate customers are the ones we are after. Take a look at the jaws of the men who have been great vote getters and politicians, and you will see what I mean. It's a simple thing after all, isn't it?"—Selected.

THERE are no after regrets attached to doing the square thing.

THE man who boasts of getting the best of the bargain in a trade will swindle you at the first opportunity.

#### **Mothers and Daughters**

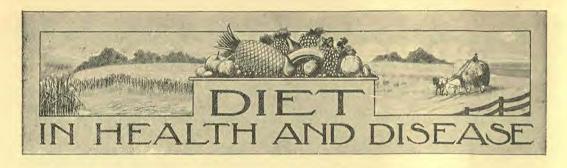
ONE of the saddest of the many sad sights on this broad earth is that of a mother and daughter estranged, meeting only on the low ground of daily questioning, "What shall we eat?" or, "What shall we drink?" or, "Wherewithal shall we be clothed?" That two persons whom God has united by a bond so holy and sacred as that existing between a mother and her woman child, should recklessly ignore the bond, or fretfully allow it to chafe, is as incomprehensible as it is common. But, in spite of all that the one has borne and suffered for the other, in spite of their close relations, we see far too many mothers and daughters who are strangers. There is vain regret on both sides; they would like to be more to each other; they envy mothers and daughters who are friends; but between them stretches the gulf of years of separation, and the place where they might have crossed lies far back in the days that are gone.

We are too prone to blame the daughters for this separation, for usually it began when the daughters were mere babies, and mother was all their world. Perhaps the first grief came the day the mother was too busy to comfort her baby

heart, or too tired to hold the little one; and then so many of us know too well how the breach widened-how the mother laughed at the little secret told in baby glee, or was indifferent to the childish trouble, or didn't care when the tiny scholar stood at the head of the class, or scolded because the little one fell and tore the new frock. And so, because of the cold indifference, because the mother forgot that baby joys and sorrows are very real to baby hearts, the child began to feel that "mother didn't care," and went somewhere else for attention and sympathy. Is it strange that, by and by, when the child is herself a woman, she does not seek counsel from her mother, and will tell the secrets and aspirations of her young womanhood to anyone rather than to her mother?

O mothers whose children are yet young, can you not see to what you are driving them by rejecting their little confidences? Are you "too busy to bother with them"? Feed them on bread and milk, and clothe them in gingham pinafores, if necessary, but take time, make time, somehow, to comfort and caress the babies, and to make them feel that you are not only mothers, but friends.— Golden Rule.





## A Health Officer in Every Home

EULALIA RICHARDS, M.D.

It is not sufficient that there should be a health officer in every town or municipality. There should be a health officer in every home, one whose duty it is to safeguard the health of the family by personally attending to the hygienic conditions of the home.

At this season of the year there is much preventable illness, particularly those disorders which are caused by the eating of food which has undergone putrefaction or fermentation, or which has been infected by means of flies or other insects.

. What person is better qualified to safeguard the family food supply than the wife and mother? Seldom can the servant be intrusted with such responsibility; for, as a rule, though quite willing, she lacks the knowledge necessary to the efficient discharge of this duty. then, is another burden which must be laid upon the shoulders of the busy mother. But she who gives the matter adequate thought will perceive that the maintenance of strict household and personal hygiene lessens her burdens by the prevention of illness with its attendant cares and anxieties.

Household hygiene is chiefly a matter of cleanliness, cleanliness of the house itself and of the premises, cleanliness of the person and of the clothing, cleanliness of the food and of all that pertains to it.

In order to maintain the required degree of cleanliness without unduly multiplying the household cares, it is necessary to simplify *everything*—the house-furnishings, the draperies, the family wardrobe, the menus, and the individual dishes. Particularly at this season of the year when all work is more or less irksome, let all unnecessary carpets, draperies, curtains, and ornaments be packed away, or better still, permanently disposed of. Several small rugs, which may be easily cleaned, are far preferable to the carpet which is a notorious dust and germ retainer, while short muslin curtains may well replace the more elaborate window hangings.

The simplification of the clothing for the family deserves consideration quite by itself.

But it is chiefly the application of hygiene to the culinary department of the home which we should consider during these mid-summer months.

Let the heavy, heat-producing foods, such as porridges, roasts, gravies, boiled puddings and the like, be replaced by the more seasonable foods which nature pro-Fruits and fresh vegetables should hold first place in the dietary. These, together with milk, butter, eggs, and such ready-to-eat cereals as granose and corn flakes, constitute an almost perfect dietary. In order to ensure the quality of the food, it should be procured in as fresh a state as possible. Fruits, vegetables, and other farm and dairy produce, should be obtained frequently and in small quantities, as decomposition and fermentation of food take place rapidly in warm weather. Even flour and dry groceries should be

purchased in only small quantities, as weevils and other insects infest the food if it is stored for any considerable time. All perishable foods should be kept in a cool, well-ventilated store-room.

Since milk affords the most favourable conditions for the growth of the germs causing consumption, typhoid, diarrhœa, and other grave diseases, it is necessary to sterilise it by boiling. This should be done just as soon as the milk reaches the hands of the housewife. A quick and convenient method is to heat the milk to boiling in an aluminium saucepan. When an aluminium vessel is used, the milk will not scorch even over a gas flame. soon as the milk is scalded, it should be cooled as rapidly as possible (by standing in cold water), and kept in a cool place. It should be covered with butter muslin to prevent the entrance of dust and flies. Milk intended for the use of an infant should receive the greatest care during the hot season. Fresh milk, thoroughly sterilised, placed in a clean vessel, rapidly cooled, and protected from dust and flies, is the safest milk which can be supplied to a baby. It may be well to remind the housewife that all her efforts may be in vain if she washes the milk jugs and other vessels with an unclean dishcloth and dries them with dirty tea-towels. necessary articles must be kept scrupulously clean by the free use of hot water, soap, and sunshine. An ill-smelling, greasy dishcloth is a disgusting thing, which should never be tolerated in any kitchen.

Milk is not the only food which must be protected from dust and flies. All foods must be so guarded. Flies breed in filth, feed on filth, and carry filth. If possible, keep flies out of the house. This may be accomplished by means of well-fitted screens to all of the doors and windows. In the absence of screens the greatest care must be taken to prevent the access of flies to the food supplies. All cooked foods should be kept in a screened safe or cupboard, and, in addition, covers should be used over all milk jugs. As a further precaution, the dining

table should be cleared immediately at the close of each meal.

One housewife was astonished on a hot summer evening to find a dish of custard swarming with small fly maggots. This custard had been baked fresh for lunch on Although the dish had the same day. been removed from the table promptly at the close of the meal, it was evident that a fly had deposited her eggs in the custard at some time during the course of the meal. In order to prevent such occurrences, it is best on hot days to cook only as much food as is required for the one meal, and to keep the food covered until it is actually served in the course of the meal. This applies particularly to custards and other milk and animal food.

It should be remembered that not only may food be infected by means of flies, but certain decomposition changes may occur in it which render it highly dangerous to the consumer. This decomposition process results in the production of toxins or poisonous substances. Ptomain poison belongs to this class of food poisons. The important point to remember is that the development of ptomain poison in a food does not in any way alter the appearance, the odour, or the taste of the food. foods which are most liable to undergo this putrefaction process resulting in ptomains are milk, eggs, cheese, fish, and all animal proteids. For this reason, if for no other, it is wise to use flesh foods sparingly, or not at all during the summer months. The greatest care should also be exercised to avoid the use of stale milk, eggs, and other dairy produce.

Recently several members of a vegetarian family suffered a mild but unquestionable attack of ptomain poisoning through eating the remainder of a chocolate blanc-mange which had been prepared two days previously, and a portion of which had, at that time, been eaten with no unfavourable results.

Not only should the housewife carefully maintain hygienic conditions within the house, her efforts must extend to the entire premises. All refuse from the house should be promptly burned, buried, or deposited in closely covered garbage tins. If flies are allowed access to decomposing food stuffs, they feed and breed in the refuse, and then carry filth on their bodies into the house and to all unguarded food supplies.

## Diet of the Nursing Mother

THE diet of the nursing mother should not essentially differ from what would be considered to be a healthy one for her at any time. There is no special diet which, under all circumstances, is best for all nursing women during the period of their lactation. In the early days of the puerperium there is, as a rule, more danger of over-feeding than of under-feeding the mother. The tendency is to give too much solid food, with the result that when the secretion of the milk is being established the total solids are increased to a degree beyond the capacity of the still undeveloped digestive function of the infant. Infants in the early days and weeks of life thrive better on a milk that shows a high percentage of water in proportion to that of the total solids. A rule which has in my experience become almost an axiom is that the age of the individual infant is in inverse proportion to the need of a large amount of water in its food. A light and plentiful diet should therefore be given to the mother while she is confined to her bed. This diet should consist of milk, gruels, soups, vegetables, bread and butter. When the mother is able to go out of the house again, and has resumed her usual habits, the quality of the diet can be very much increased, and she can have the usual variety of food represented by vegetables, milk, fruits, and cereals. There are no special kinds of food which are contra-indicated, provided we keep the food within the limits of the ordinary articles which commonly represent a plain but nutritious diet. It is very important for the nursing mother to have her meals at regular intervals, and during the early part of the lactation to take food somewhat more frequently than when she is not nursing. The additional meals as a rule should be made up of milk. She should receive as much milk as is compatible with her digestion, and should drink a plentiful supply before retiring at night. wide range of food for the nursing mother has been recommended with a purpose. The food of the nursing woman is without doubt closely connected with that which she provides for her infant. ous substances are eliminated by the mammary gland, and we should therefore impress upon mothers the importance of a carefully arranged diet when they are nursing. Certain vegetables and sometimes fish will in individual cases affect the milk and cause discomfort to the infant. We must, then, in every case, seek to determine which article of diet may cause disturbance in the special woman's milk secretion, and eliminate that article. We should, however, be very careful not to prohibit this special article of diet from the regimen of a large number of women to whom it might be of benefit rather than of harm, simply because it has affected the milk of a few women. For the average a plain mixed diet, with a moderate excess of fluids and proteids over what she is normally accustomed to, will, as a rule, give the best results.-T. M. Rotch, M.D., Harvard Medical College.

## Why Popcorn Pops

WHY popcorn pops is not fully understood, says a recent bulletin of the Agricultural Department. Formerly it was supposed that the popping resulted from the expansion of oil in the kernel on being heated, but more probably it is due to the expansion of moisture contained in the starch cells. This moisture expands, when heated, with sufficient force to cause an explosion of the cells, and the kernel turns completely inside out, enveloping the embryo and hull. Probably the expansion of the air within the seed coat also plays some part in the process.

## Popular Dietetic Instructions

MARY W. PAULSON, M.D.

PREVENTION is the medicine of the future. To-day we scarcely read a magazine or newspaper that does not contain some helpful health hints.

Rheumatism, kidney diseases, arteriosclerosis, and many other diseases could be prevented if more attention were given to According to Professor Chittenden of Yale, the average individual should normally consume from one to two ounces of protein, two ounces of fat, and sixteen ounces of carbohydrates (sugar and starches) per day.

In other words, according to the caloric



Fruits and Nuts are Both Nutritious and Appetising

proper feeding and to the elimination of waste.

Some one has well said that if we look after respiration, digestion, and the elimination of waste, we should rarely be sick.

Nothing is of greater importance to our physical well-being than wholesome nourishment. We have long since passed the era when the feeding of the body can be based merely on appetite and taste.

It is certainly far more important to know how to feed human beings correctly than it is to feed horses, cows, or pigs. estimation of food values, the average adult individual requires about 200 calories of proteins, 600 of fats, and 1,500 of carbohydrates, making a total for the day of about 2,000 calories of food units, depending somewhat upon the size of the individual, his work, and the weather.

Calories represent the potential energy of the food. The greatest bulk of our meal should be carbohydrates, and the smallest, proteins. This ratio, however, varies according to the age, the exercise, elimination, and the power of digestion of the individual.

To reduce these figures to practical use we must have some knowledge of the nutritive value of individual foods.

#### A Balanced Meal

After knowing their nutritive value it becomes necessary to so group these foods in a menu that the result for the day's rations will furnish the proper amount of protein, fats, and carbohydrates. We will make out a simple breakfast menu containing the correct nutritive values. These figures are given for the average amount one individual will eat at the meal:—

Breakfast	Proteids	Fats	Carbohy drates
Orange	4	2	69
Rolled oats	14	5	59
Whole milk	23	67	35
Breakfast toast	4	12	24
Butter	1	99	_
Hashed potatoes	8	35	57
Total calories	5+	220	251

In adding up the fats and carbohydrates and comparing the proteids with it we find the proteids make about one-tenth of the meal. We may possibly have difficulty in making out our menu to get always the exact ratio with each meal. That is not necessary; it can be divided up through the three meals of the day. We may have an excess of one element at one meal and reduce it at another meal.

I am sure most housekeepers would find it very difficult and troublesome to make out every day a menu from figures like these. But it is only necessary for us to have in mind a general idea of the nutritive value of foods. Then by one glance we can get an idea as to what we want. We know that butter is all fat. We know that rolled oats and the cereals generally contain a large per cent of carbohydrates with the right amount of proteins. We must remember that an excess of protein is injurious, because it adds to the toxins in the body, and causes many of our chronic diseases.

### The Salts of Food Minerals

We must not overlook the importance of salts, or ash, in the study of foods. These are found largely in vegetables, fruits, and the covering of the cereals. They are necessary to make good blood cells, bone tissue, and they act as stimulants to the activities of other tissues, particularly the glands of digestion, thereby greatly aiding digestion.

We sometimes lose a large per cent of these salts in the cooking of foods. For that reason steaming the vegetables is preferable to cooking them.

#### Some New Light

Recently much is being said concerning vitamines in food, which are closely allied to the salts. The vitamines are a substance indispensable to life. Cassimar Funk, who has made many experiments with these, says that he regards vitamines as the stimulating substance for the bodily ferments and of vital importance to the thyroid and other ductless glands.

They are found in plants, especially their seeds, in the whole grain, and particularly in the outer coat of the grain which is ground off in the making of fine flour or polished rice. They are also found in vegetables, such as potatoes, carrots, peas, etc., and in fresh fruits.

A temperature of 265° F. for twenty minutes destroys these substances, also exposure to extreme dryness.

The value of vitamines was discovered in the study of the disease Beri-beri, which is so common in Japan and other Eastern countries, where much polished rice is used. In polished rice the vitamine is thrown away; hence we are recommending to-day the use of unpolished rice. The same criticism can be made of fine white flour.

The lack of vitamines is productive of such deficient diseases as tuberculosis, pellagra, scurvy, etc.

The vitamines are particularly valuable in infant feeding. When the child does not get fresh food or fresh milk it may develop rickets or scurvy, and other ailments.

#### Helpful Hints to Dyspeptics

A dyspeptic must have, first of all, only a few foods at one meal; the gastric juice cannot take care of a large variety.

The dyspeptic must thoroughly chew his food. He needs saliva to aid his digestion, so he must thoroughly combine the food and the saliva.

He must avoid all foods that are made of several constituents, like rich puddings, cakes, pastries, and roasts. He must also eliminate largely cane sugar and condiments, soft hot breads, and too much drinking at meals. If he drinks at his extent. He can eat protein, but if he eat this too freely he will soon suffer from autointoxication and will speedily develop nevous and sometimes arthritical conditions that go with autointoxication. He should take foods which contain a great deal of salts and water, such as succulent vegetables or green garden produce. I have made a list of foods which can be recommended for diabetes:—

Gluten in all forms, such as gluten bread, biscuits and porridge; and eggs in any form.

String beans, spinach, beet greens, lettuce, asparagus, onions, cauliflower,



Salts of Food Minerals are Found Largely in Vegetables

meal he must do it after the food has been thoroughly chewed and left the mouth; it is better to wait till the end of the meal.

The dyspeptic with an acid stomach can eat freely of butter, yolks of eggs, olive oil, pine nuts, such sub-acid fruits as prunes, blackberries, pears, and baked sweet apples.

He may eat purées of vegetables, peas, beans, and toasted grains such as rice flakes and breakfast toast, boiled rice, baked potatoes, simple custards, eggnogs, tapioca, sago, and similar foods of that kind.

#### Dietetic Regime for Diabetes

The diabetic must adhere strictly to certain lines of foods; he must leave out sugars entirely, and starches to a large turnips, tomatoes, celery, cresses, olives, cucumbers, vegetable oysters.

Grape fruit, lemons, currants, baked sour apples, strawberries, and gooseberries without sugar.

Buttermilk, cottage cheese, butter, nuts, particularly almonds, Brazil nuts, and pine nuts.

Raw mayonnaise, vegetable bouillons, vegetable soups made of the vegetables given in the list.

We may add oatmeal or baked potato occasionally to vary this diet. Otherwise all starches and sugar must be entirely eliminated from the dietary.

#### Feeding the Anaemic Patient

There are, of course, various forms of anæmia, so I can simply mention certain

foods that are serviceable for anæmia: An excess of all green vegetables, yolks of eggs, tomatoes, and strawberries added to a general dietary. Of course the food must be prescribed somewhat according to the cause of the anæmia and condition of the patient.

## A Laxative Dietary

This sort of dietary is needed by most people. Fresh fruits or fruit juices can be taken the first thing in the morning or the last thing at night, particularly apple or orange juice; fruit jellies, fruit soup, stewed raisins, prunes, figs, buttermilk; coarse whole wheat flour and bran, which can be used in the form of bran porridge or bran biscuit.

I do not think enough stress is laid on the importance of eating of the bulky vegetables such as asparagus, cauliflower, spinach, raw cabbage, tomatoes, carrots, raw or cooked, beet greens, sweet corn, vegetable oysters, and egg plant.

In nervous spastic constipation, especially when mucous colitis is present, these bulky foods cannot be eaten without irritating the bowel. In such cases the more bland foods should be used, and liberal doses of White Russian Mineral Oil should be taken after each meal. This does not absorb, is perfectly harmless, and does not create a laxative habit.

There are some forms of constipation where coarse foods cannot be used; oily foods must be used instead, such as olive oil, Russian oil, butter, and cream.

In fevers it is very important to know what to eat. Proper food not only keeps the patient from starving to death, but it actually reduces the temperature. In acute fevers we should give the patient plenty of fruit juices containing little or no sugar. A little later give cereal gruels, buttermilk, vegetable bouillon, fruit jellies.

#### The Diet for Gastric Ulcer

We hear much about gastric ulcer nowadays. So many people have a sharp pain in the stomach soon after eating, and it is extremely essential for such to know what to eat, and not simply to guess at it. In gastric ulcer the patient should eat nothing that will irritate the wall of the stomach. Sweets, acids, spices, condiments, and pickles should be strictly avoided. I saw a person the other day who was suffering the most awful distress in her stomach and actually vomiting blood, from a fresh ulcer, sit down and eat a salad containing vinegar and mustard; and she knew better. I call that actual suicide, nothing short of it. There are plenty of people who seem to deliberately kill themselves by the way they eat and live.

In gastric ulcer we give the patient cream pea soup, cream rice soup, cream of spinach and cream of asparagus soups; and strained gruels, such as oatmeal, gluten, rice and toast gruel.

Frozen foods are borne very nicely by patients suffering with gastric ulcer, such as frozen malted milk, or ice cream. Thoroughly boiled rice, jellied and raw egg, cream and milk, are generally very acceptable.

That God has recognised the importance of proper eating is evident from the frequent mention which is made of food in the Bible. Eccl. 10:17 says: "Blessed art thou, O land, when thy king is the son of nobles, and thy princes eat in due season, for strength and not for drunkenness!"





## How to Prevent Boils

ALFRED B. OLSER, M.D., D.P.H.

BOIL, also known as a furuncle, is an acute localised inflammation of the deeper tissues of the skin, and often results in softening of the structures, and consequent formation of a small abscess which burrows its way to the surface, and discharges an infectious material known as pus or matter. After entirely getting rid of the pus and destroyed tissue, the wound heals, leaving a small scar.

## Life History of a Boil

The most important predisposing cause is loss of tone, loss of vitality, and impoverished blood; in a word, a certain degree of ill-health. Lowered vitality means a serious depletion of the resistive forces, or natural defences of the body, which renders it more liable to the invasion of germs of one sort or another. The direct exciting cause or immediate agent in the production of the boil is a pus germ. The door of infection is usually a slight wound such as a scratch, pin prick, or some other seemingly insignificant wound of the skin, or possibly, in some cases, the opening of one of the fat glands of the skin. Now the microbes of disease are almost omnipresent, and oftentimes abound on the surface of the skin. but so long as they remain on the surface little harm results, but when they get through the skin, and into the deeper tissues without being destroyed, they begin to multiply, producing various poisons known as toxins, which are destructive to living matter. As soon as the

germs enter an attempt is made to destroy them, and thus prevent the formation of a colony of these intruders; but if there is not sufficient vitality in the living tissues to bring about the destruction of the invading enemy the next best course is adopted, and that is, to shut off the offenders from the surrounding healthy tissues, and thus limit their growth and the harm they can do. To form a wall of protection against the death-producing germs countless numbers of white blood cells, which Metchnikoff has aptly termed "soldiers," are rushed to the spot from all sides, thus quickly surrounding the germs and preventing their spread among the neighbouring tissues. At the same time local tissue cells proliferate and multiply, thus assisting in the fight against the intruder.

But the germs having already gained an entrance, very soon their harmful effects are observed in the production of a hard, painful, more or less cone-shaped swelling, which is both red and tender. The living tissues which are invaded are soon destroyed, as well as a very large number of white blood cells which have been brought in contact with the germs, and have laid down their lives on behalf of the body. The swelling enlarges, softens, and soon the presence of fluid is detected, and after a time, unless it is lanced, the abscess breaks and discharges a yellowish, infectious matter, at the same time bringing relief from pain. Later on the "core" sloughs away, after which healing takes place.

#### The Causes

Anything which materially interferes with health and diminishes the life forces of the body must be looked upon as the most important of the predisposing causes. But there are other factors which require consideration, and chief among these is the question of cleanliness. It is a fact that soap and water do not agree with germs, and where they are used freely and vigorously so as to keep the skin in a clean condition there is less danger of germ invasion, even though there may be enfeebled health. Rigid cleanliness, not only of the face, but equally of the hands, neck, and, indeed, all parts of the body, is essential to success in avoiding boils.

Another important factor is an abrasion of the skin which is only too frequently brought about by scratching with fingernails marked for a funeral. Even though the skin itself may be clean, such fingernails, with more or less distinct "bands of mourning," are always reeking with germs which are capable of causing boils or carbuncles, not to mention still more dangerous disorders. Itching is usually a sign of uncleanness either of the skin superficially or of the blood and tissues internally. But anything which scratches the skin and causes an abrasion such as the roughened edge of a worn collar is almost equally dangerous. This explains why boils in the region of the neck are so common.

#### The Treatment

It is sometimes possible to abort a boil, that is, to prevent its further development before the abscess is formed. Cleanse the threatened skin with soap and water, and the application of an antiseptic dressing such as hot boric acid compress. Cover the compress with a piece of oiled silk or a piece of gutta-percha, and then apply a suitable bandage to keep it in place. Another excellent dressing consists of a piece of absorbent cotton or folded lint of proper size and thickness, which has been soaked in a solution of six ounces of glycerine to which five drachms of boric acid have been added.

This dressing is also covered with some impervious material such as gutta-percha. Painting the reddened skin with tincture of iodine, diluted carbolic acid, or silver nitrate, may also abort the boil. Ordinary poultices and fomentations should be strictly avoided since they almost always produce more harm than good by spreading the infection.

It is extremely necessary to bear in mind that the matter from a boil is always infectious, and consequently must be carefully destroyed so as to prevent further mischief. It is necessary to protect the surrounding skin, not only by keeping it clean, but also by the application of some one of the antiseptic measures mentioned in order to prevent further infection.

#### Some Preventive Measures

Anyone who has suffered from boils requires a change of air if possible, and an active, invigorating life with plenty of fresh air and outdoor exercise. The natural defences of the body require strengthening. If the patient is suffering from some constitutional disorder, such as diabetes or Bright's disease, then it must be treated as required. Either disease makes a person more liable to boils. Tonic baths of all kinds are always in order, and every possible effort should be made to maintain activity of the bowels. Constipation means a varying amount of autointoxication which poisons the blood and lowers vitality. When a person is suffering from a crop of boils, a disorder known as furunculosis, it is well to administer a mild saline purge or saline enema, in order to keep the bowels open.

Naturally the diet is not an unimportant matter, for the strengthening of the vital forces depends very largely upon the quality and quantity of the food supply. It is a great mistake to rely upon alcoholic stimulants or the numerous medicinal so-called tonics which are advertised so freely nowadays. Plain, wholesome, nourishing food is the best tonic. Fruit especially should be taken freely, either fresh or stewed. If this is done, it is

rarely necessary to give any further attention to the bowels, for the fruit itself is a mild, gentle laxative, and its wholesome salts and acids do much to purify the blood.

## Shock

In medical language, "shock" means the depression of the vital forces, both mental and physical. The condition may result from many causes, and may vary from a faintness and pallor that soon disappear to a state so desperate that the sufferer dies of it, as in the case of serious accident or difficult surgical operations.

Shock may also be the result of an overpowering emotion, like great terror. That kind of shock is often seen in the survivors of any terrible accident. who have not got so much as a scratch suffer for a long time from a state of impaired health; sometimes their nervous systems are so badly shattered that they never entirely recover. That is one of the many reasons why foolish practical jokes are wrong. It is not funny to dress up like a ghost, to jump out on timid children from behind doors, to play "jokes" with dead mice or snakes. such pleasantries are dangerous as well as stupid. Many an unfortunate child has been made the slave of fear all his life by reason of a shock that some playmate gave him in his youth.

The extreme type of shock that is seen after painful accidents of surgical operations has its merciful side, for it deadens the sensibilities, and withdraws the mind from the suffering of the body. times there is complete unconsciousness, and soon if consciousness persists, the patient is quite indifferent to everything. That enables those who can help, to move the sufferer and to begin proper treatment. After a time that varies with the severity of the shock, the treatment is followed by The stupor wears off, the a reaction. patient grows restless, his pulse gets stronger and slower, colour comes back to his face and lips, and his eyes begin to

look more natural. That means that the vital force, which was beaten back by the shock, is asserting itself again. The remedies that the physician uses are those which will restore the blood to its normal flow and stimulate the vital functions.—

Selected.

## Simple Home Treatment of Pneumonia

T. J. Evans, M.D.

THE early intelligent treatment of pneumonia will be found an important factor in the ultimate recovery from an attack of the disease. Should one be suddenly afflicted with pneumonia, it is quite essential to have some home treatment in mind that will assist the patient and yet will not interfere with any aftertreatment. Pneumonia is a disease which attacks individuals of all ages and sex, the male being more subject to an attack than the female, as they are usually more subject to the inclemency of the weather. This disease is due to a definite microorganism called the pneumococcus, which is found in the throat and mouth of many individuals, and becomes active when the vitality is lowered, as from a sudden congestion due to a chilling of the surface of the body. In order to treat the disease intelligently and successfully, it is necessary to have some knowledge of how the disease manifests itself in the system. The changes that take place in the lung tissue in lobar pneumonia are first an intense congestion, causing an enlargement of all the fine capillaries and lymphatics. Following this there is an exudation of blood into the alveoli of the lungs. completely filling the air spaces. During this stage of solidification the affected lobe of the lung resembles a section of the liver. The next change that takes place in the lung is the liquefaction of these secretions that have found their way into the air spaces. The colour of the lobe is now grey, and the secretions are soon absorbed or eliminated by expectoration.

During the stage of engorgement, the respiration is rapid, the pulse is slow, full

and bounding, and the temperature is high, ranging from 102° to 105°. The face is congested, and the patient may be delirious. The hands and feet, as a rule. are cold, as the blood has been attracted to the congested area. The more intense the congestion, the more serious it is for the patient. The expression is one of anxiety and fear. Each breath seems to be the last one, to the patient. As soon as this condition presents itself, treatment should be instituted at once. Much valuable time may be lost in waiting for the arrival of a physician. The patient's bowels should be emptied by the use of a good cleansing enema. The patient should then be placed in a hot bath for a short time, keeping cold compresses to the head and neck. Following this, a dry blanket pack may be applied to the hips and legs in bed, accompanied by a cold compress to the head. A large cold compress should also be frequently applied to the chest. A wet blanket pack may be used to the extremities for about twenty minutes several times during the day with excellent results, always keeping a compress to the chest, neck, and head during the treatment. This dilates the small blood-vessels of the lower extremities. thus relieving the congestion in the lungs and face. Sometimes for a severe pain in the chest a short application of heat by means of the fomentation will be of service. But prolonged applications of heat may increase the congestion. Under no consideration should the extremities be allowed to get cold.

It is not necessary to encourage feeding. Small quantities of liquid food are all that is essential to sustain the patient, for he is not likely to digest food well with such a high temperature.

Abundance of fresh air is one of the essentials in the successful treatment of this disease. The air carries away the poisonous material, and has a cooling, soothing effect upon the inflamed lung tissue. Fresh, cool or cold air, with children, is one of the most useful agents in the treatment of this disease. This treatment will not only give relief until the

physician arrives, but has been used very successfully during the whole attack until recovery was established.

## Infectious Diarrhoea

Charles Henry Hayton, B.A., M.D.

DIARRHŒA is a term used to designate the frequent loose movements of the bowels. It depends upon an increase in the worm-like movement by which the alimentary canal propels its contents, and also upon an increase of the intestinal secretion. Both the increase of movement and secretion is a wise provision of nature to expel some poisonous, irritating substance, which has been introduced into the canal by means of the food, or has been manufactured within the body. Diarrhœa is most prevalent in hot weather. It is much more common in children than Those children who live amidst unhygienic surroundings, in overcrowded districts, with a lack of fresh air, sunshine, pure food and water, are especially subjected to fatal attacks. Fourfifths of the cases are under ten years of age, and the greater number of these are between twelve and eighteen months old.

### Why Young Children are Attacked

There are many reasons why infants and young children are more susceptible to the complaint. The structure of their organs and action of their tissues are different from those of adults. Their organs are growing and developing very rapidly, and are low in resisting powers. secretions and excretions are not under the same control as later in life, nor are they as abundant in some cases. Their stomach secretions, for instance, lack especially in the quantity of hydrochloric acid. Hence when bacteria are introduced with the food they are not all killed in the stomach, but find their way into the intestines, where they set up their nefarious work. They grow and multiply and produce toxins, which soon permeate the whole body. Nature responds and sets her forces in working order to expel the intruders. But the armour of the infant and young child, both within and without, is very weak against the inroads of bacteria once they gain an admittance.

### **Artificial Feeding**

Not only from an anatomical and physiological basis are children more suscep-

much cannot be said to impress upon mothers and those caring for infants and young children the great necessity of keeping all utensils used in the feeding scrupulously clean. The rubber teats should be kept when not in use in a boric acid solution, one teaspoonful to half a tumbler of water, and rinsed in hot water before using again. The bottles should



Allow the Infant Plenty of Sunlight and Fresh Air

tible, but from the view-point of feeding they are in much more danger than are adults. Artificial feeding is one of the chief factors in infectious diarrhœa. It is not the artificial feeding in itself that is the danger, but the manner in which it is done. The use of impure and improper food is the chief cause of all the mischief. Spoilt milk and impure water have laid away many a promising infant. The impure milk may be due to disease in the cow, pollution in the dairy, or to dirty vessels and bottles in the home. Too

be scalded after each feeding, and also rinsed in hot water before using. Nothing is better established than the close relationship between artificial feeding and infectious diarrheea.

#### Overfeeding

Another common and very serious mistake often made is overfeeding. Artificially fed children are almost always overfed. The common practice of feeding an infant every time it cries is fraught with great danger. Overfeeding is especially to be avoided during the hot weather. Infants cry from heat and the want of water more than food during this time. A spoonful or two of cool, boiled water is all the child needs, not food. It is a good rule to diminish each feed of milk by one-half, and add boiled water to make the required quantity. Infants and young children, like adults, need less food and more water during the oppressive seasons. Sometimes articles of food totally unfit for the child are given to it. All kinds of solid foods are frequently given to children from twelve to eighteen months old, while the regular diet of the family is often fed to children two years old.

#### **Preventive Measures**

Infectious diarrhœa is easily prevented. both in infants and young children, if the parents are careful with regard to the proper hygienic surroundings of the children, allowing them plenty of sunlight and fresh air. Proper regard should be given to their personal cleanliness—hands, face, and mouth kept clean, frequent bathing, and extreme carefulness of napkins. During the hot days soiled napkins should be immediately washed or placed in a disinfectant solution. Take the little ones for a holiday whenever possible to the country or preferably to the seaside. Then, again, by being extremely careful with the food supplied much can be done to further lessen the mortality. Mothers should, if possible, pass over the first summer without weaning their children.

Watch carefully for the first sign of stomach and intestinal disorder. Milder symptoms nearly always precede the more violent attacks. Examine the stools carefully. They gradually become more frequent, then thin, and turn first green, then brown, then mucous. They always contain particles of undigested food; the odour changes and becomes fætid and foul. The child becomes peevish and fretful, especially at night. It grows pale, muscles flabby, and begins to lose weight.

#### **Curative Measures**

In treating the early stages of diarrhœa one should bear in mind that it is not an inflammatory condition of the intestines, although it may become that later. It is rather an acute intoxication arising from the intestinal contents, such as unhealthful or unripe articles of food, altered intestinal secretions, and other toxic substances produced by bacteria. Nature gives one the key to the whole situation by endeavouring to rid the body of the poisonous matter.

It is therefore a conservative process of nature intended to rid the intestines of a poisonous, irritating agent, and the employment of means to empty the bowels is only supporting nature in her endeavours. Often prompt and vigorous measures of this kind at the first symptom can abort the more serious attack. A teaspoonful or two of castor oil, with a few drops of lemon juice to disguise the taste, is most effective in cleansing the bowels. Do not allow a diarrhea of any kind to continue in children. It is a dangerous thing.

One must also remember that in the early stages digestion is practically arrested. Therefore the giving of food is contra-indicated—all feeding should be stopped at least for twenty-four hours, and the child then given frequently, but in small quantities, cold whey of milk, or barley water or albumen water, and increase the food by stages. It is always best, however, if these simple remedies are not effective, to send for the family physician.

An interesting discovery made during the recent tests of butter by the United States Government pure food experts was that it gains purity with age. Among twenty-five samples bought in Boston, little difference in purity was found, though the price varied greatly. But it was discovered that after six weeks few, if any, disease germs are left. This hint will be useful to landladies and consoling to boarders.

## Look Pleasant, Please!

"LOOK pleasant, please!" the photo expert told me, for I had pulled a long and gloomy face; and then let a wide, glad smile enfold me and hold my features in its warm embrace.

"Look pleasant, please!" My friends, we really ought to cut out these words and put them in a frame; long, long we'd search to find a better motto to guide and help us while we play the game. Look pleasant, please, when you have met reverses, when you beneath misfortune's stroke are bent, when all your hopes seem riding round in hearses—a scowling brow won't help you worth a cent. pleasant, please, when days are dark and dismal and all the world seems in a hopeless fix; the clouds won't go because your grief's abysmal, the sun won't shine the sooner for your kicks. Look pleasant, please, when Grip-King of diseases, has filled your system with his microbes vile; I know it's hard, but still, between your sneezes, you may be able to produce a smile. Look pleasant, please, whatever trouble galls you; a gloomy face won't cure a single pain. Look pleasant, please, whatever ill befalls you, for gnashing teeth is weary work and vain.

Look pleasant, please, and thus inspire your brothers to raise a smile and pass the smile along; forget yourself and think a while of others, and do your stunt with gladsome whoop and song.—Walt Mason in Ladies' Home Journal.

## A Sure Cure for Constipation

ONE of the common causes of the clogging of the system with impurities is constipation of the bowels. And many of the stomach disorders, and many of the other diseases with which people are afflicted are due to this cause.

In handling a great number of these cases during the past twenty-five years, I have found that following simple methods, conscientiously adhered to, will conquer the most stubborn cases.

One of the things that gives the greatest relief is whole wheat, cooked for four or five hours in a double boiler. I have seen cases of over twenty years' standing, in which all the laxatives have been used to no effect, respond to this treatment in a few weeks' time. Some of the wheat prepared in this way should be eaten with each meal.

Another great help is to take a glass of water as soon as one wakes in the morning. In about ten minutes take another, repeating this three or four times, if possible, before breakfast. In case the water cannot be taken alone, the juice of a lemon or an orange may be added.

An exercise of great value in these cases is to lie on the floor or something equally firm, before the body is clothed in the morning. Raise the limbs at right angles with the body, taking five seconds to raise and lower. Raise first one limb, then the other, then both together. Keep up this exercise for four or five minutes. This will strengthen the muscles of the abdomen, and is one of the very best of exercises.

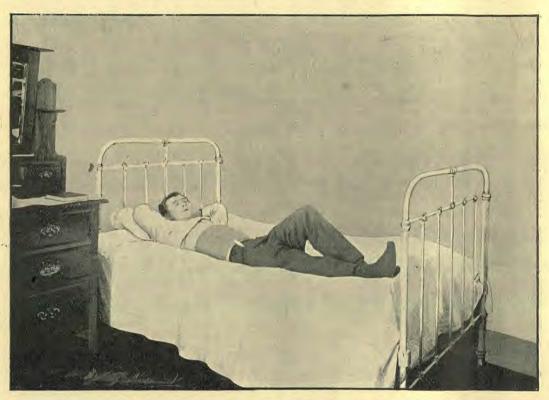
## Moist Abdominal Bandage

This is a water treatment that falls under various names. Outside of the title that we have used, we find "The Wet Girdle" and "Neptune's Girdle" often used. It is one of the simplest of hydriatic treatments, and yet one of the most effective. It is so simple in its construction that anyone can be taught to apply it, and there are very few contra indications to its use. It is not an unpleasant treatment at all. The first application may feel a little uncomfortable, but after several applications the patient is loathe to do without it.

A linen bandage eight or nine inches wide and long enough to go around the body three times is used. This is wrung out of cold water at from 50° to 70°. The colder the water, the drier the compress should be. This is wound around the body about four inches above and four inches below the navel. Around this is

wrapped a flannel bandage twelve inches wide of one or two thicknesses, and surrounding all of this in special instances is fitted an impervious dressing of oil silk. When the cold is applied to the abdomen, a slight chilly sensation is manifested, but if the flannel covering is properly adjusted and the girdle is properly applied the patient soon experiences a pleasant,

dominal organs by its influence upon the sympathetic nervous system. We can readily see the close connection that exists between the skin of the abdomen and the underlying organs when we note the extreme stiffness of the abdominal wall in inflammation of the appendix. This is due to the nerve connection between the internal organs and the exterior. The



"The patient soon experiences a pleasant, cool sensation."

cool sensation. A feeling of comfort rather than discomfort is manifest.

The bandage is generally put on at night and removed in the morning. At times the girdle is worn both night and day. When it is removed in the morning the part covered with bandage should be sponged off with cold water and followed by brisk friction.

Benefit is derived from this remedial agent by its stimulative, sedative, and derivative action. The cold that is applied is a powerful stimulant to the abgirdle may be made a sedative or derivative measure by varying the degree of protection afforded.

There are a great many uses to which this hydriatic measure may be applied. It is one of the best means we have for combating insomnia. The linen bandage should not have too much water in it, as this will prolong the chilly effect. The comfortable stage of the girdle should be noticed by the patient soon after its application. If the patient does not overcome the chilly sensation readily, it is

well to precede the application of the bandage by a hot application to the abdomen. Patients will obtain sleep by this method when all other plans have failed.

Its effect in relieving constipation is almost marvellous at times. Patients whose stools are hard, dry, and difficult to expel, will ofttimes, in the resort to this curative agent, be passing stools of natural consistency in a period of a couple of weeks. This change is caused by the increase in the intestinal juice thereby increasing the fluidity or looseness of the stool.

Because of its derivative action it is used in chronic congestion of the stomach, liver, spleen, and intestines, and if applied lower down on the abdomen, it relieves the pelvic congestion of women. A chronically congested organ suffers with an excess of blood. Unless this extra blood is removed, serious changes take place in the organ. Conditions of this kind are noted in indigestion, constipation, and disorders of the liver. The wet bandage withdraws the blood from these parts and relieves them of their extra burden.

It also acts upon the internal organs by stimulating the little nerves that contract the blood vessels, decreasing their calibre, and thus forcing the blood out of the organ.—Herald of Health.

## What to Cook for an Invalid

Evelyn Hildreth

Many a woman, equal to any ordinary emergency, has felt despair settle on her soul when, after the crisis of an illness is safely passed, the doctor begins to prescribe the food the patient may have—so little will it take to bring back the brooding terror of haunted days and nights. When the "crossness" which old nurses welcomed as a sign of returning health causes dissatisfaction with every dish of the invalid's very limited diet, many a woman has been at her wit's end to tempt the captious appetite. Even more serious is the problem of catering for those whom long illness has made fastidious. Some-

thing new, fresh, dainty and digestible is worth its weight in gold at such a time.

Cream of lettuce soup has a delicate flavour which tempts a fastidious appetite. Wash and drain three heads of lettuce, chop and fry them in a quarter of a pound of butter. Add salt, a bunch of parsley, five ounces of rice, and two quarts of white stock. Cook for forty-five minutes. Press through a sieve, add a pint of boiling milk and serve with croutons. For the invalid, hot cream may be used in place of the milk. This is not distinctly an invalid's dish, but can be served while the patient is still restricted to liquid nourishment, but needs strengthening This will serve eight persons generously.

Rice jelly has the merit of being both digestible and nourishing, and has the additional advantage of looking like a dessert. Half a cup of rice, soaked for two hours in a cupful of water, is the foundation. Add a pint of boiling water, boil for three-quarters of an hour and strain through a muslin bag. With the addition of a little gelatine it can be moulded, but it will form a jelly even without this. It can be served with sugar and cream and sprinkled with a very little grated nutmeg, or flavoured with bitter almond. If the latter is used, put half of a thoroughly cooked pear in the middle of the dish of jelly, for rice, almond and pear are natural friends.

Apple sauce may be prepared in the most healthful as well as the easiest way, by baking it slowly in a small, covered baking dish. Another way is to peel and core four large apples and bake in a casserole with the juice of a lemon, a little cinnamon or nutmeg, and half a cup of Apple sauce so made may be strained through a cloth and served cold as a drink. It will make a delicious dessert mashed to a paste and beaten up with the white of an egg and a little more flavouring. If the apples are quartered and cooked in this way, and the sugar put in first they will keep their shape and make a tempting garnish for other dishes.

A tiny puff omelet made from one egg

is an inviting breakfast dish. Beat the white and the yolk separately, the former till it is stiff. Add to the beaten yolk one spoonful of water (very cold). Have ready one of the tiny sixpenny fryingpans sold at all tinshops, or a granite ware pan of the same size, and be sure that the inside is absolutely clean and perfectly smooth. Have ready also a hot plate, and if possible one of the metal or glass covers, made for individual dishes of this kind; if not, any closed cover or a turned down bowl will do, but all dishes connected with an omelet must be hot, and it must be made the very last thing before taking the tray to the sick room. Put half a teaspoonful of butter in the pan; turn in first the yolk, then the white, and cook until the white is puffed up to twice its former size and cooked through, being careful not to brown the volk. When it is done the yolk will appear as a thin golden shell from which the white is breaking forth like a cotton ball. If the oven is fairly hot, set the omelet, pan and all, in it for an instant, and the white will "set" like a meringue. Slide it carefully on the plate, cover it, and have a little dish or small glass of currant or apple jelly to be eaten with it.

A resourceful housewife will have on the top shelf of her china-closet some especially dainty china bouillon cups, teacups, small platters, quaint glasses, the remnants of wedding china, perhaps, reserved for times like these. There is an odd set of Oriental china which is well suited to serving an invalid's dinner if there are several dishes to be kept hot, and if the tray must be carried through cold halls to the invalid's room. It may be described as a Chinese bain marie. It consists of four exactly similar shallow round dishes with straight sides, of different but harmonizing colours, one standing on another, with a cover over the dish at the top. In Chinese cooking, this column of porcelain is set on a small pail of boiling water, after each dish has been filled with the stew, soup, or vegetable to be served, and the quaint little course dinner for one is thus carried to the master, or the honoured guest, when each dish is in turn removed and placed upon a serving plate. The dishes make charming bonbon, or fruit, dishes for an informal supper, and are especially interesting to an invalid child.

"A PERSON who knows that his mother and perhaps an aunt or two have died of tuberculosis will from the beginning throw up defences against that particular enemy. He will live day and night in fresh air, eat suitable food, wear proper clothes, and so live that his inherited tendency will grow yearly less, until by and by he is in no danger of contracting tuberculosis."





#### THE LITTLE DOS AND DON'TS

Two companies of soldiers go
Aimarching through the world;
The one, with gay flags streaming out,
The other banners furled.
Each child must travel with them,
In spite of wills and won'ts;
And march among his comrades
With the little Dos and Don'ts.

The pleasant things, the helpful things,
The worth while things, and true;
Are what their pledge requires of
Each loyal little Do.
They tread to merry music, and
They're busy as the bees;
And they freshen tired people

Like a jolly ocean breeze.

The Don'ts do nothing, lazy drones!
They never try to fill
The empty minutes, hours and days;
They've neither strength nor will.
The world must turn without their aid;
For help it spin they won't!
I hope that you will never be
A useless, idle Don't!

-Selected.

## The Little Gunner

CAPE TOWN, South Africa, claims the honour of having possessed the smallest creature ever known to have been a gunner in the Royal Artillery, or any artillery, for that matter.

At the castle in Cape Town there was a big gun worked by electricity, used for giving the midday and evening time.

One day, it is said, the soldiers and civilians of Cape Town were surprised to hear the gun go off at 10.30 in the morning. The general commanding the station sent to inquire into this; the brigade major did the same. The commanding officer of each regiment and battery stationed in Cape Town sent messengers, but no one could be found upon whom to lay the blame. The officials could give

no explanation; they were as much surprised as anybody.

The general in command was sure there was mismanagement somewhere and ordered strict search made. But the culprit remained undiscovered.

Then, when the search had been practically abandoned, the little gunner was accidentally discovered and arrested. There he lay inside the instrument that transmitted the electric current from the Royal Observatory of Cape Town to the great gun. This instrument is called a relay, and is in the central telegraph office of the station. The action of the current going through the instrument's main moves a sort of light tongue that is so finely set that the slightest touch will affect it. The tongue forces the current into what are termed the time fuses, which fire the gun.

Right inside the relay was found the little gunner—a big brown spider. In its explorations within the instrument the spider must have moved the tongue and thus fired off the gun.

The general sent the spider to a museum, wherein it was installed with a card underneath titling it the "Little Gunner," and giving a full account of the exploit with the Cape Town midday gun.—Selected.

## "Got Any Copy, Sir?"

A REFRESHING interlude in the dreary dialogue on land law was afforded in the New South Wales Full Court recently. While Counsel was trying to impress upon their Honors that such terms as "dedicated" or "reserved" might, in

common phraseology, be applied to lands resumed for water supply purposes, a newspaper "copy boy" made a hurried appearance from the back of the court, and, chewing vigorously a mouthful of gum, noisily filed through the jury box and up on to the Banco bench. He bent familiarly over the astonished Mr. Justice Sly, and demanded in a harsh whisper, "Got any copy, sir?"

The boy, of course, was new to his business.

Mr. Justice Sly at once took in the situation, and directed the unabashed boy to his perspiring and completely non-plussed office representative. When the full meaning of the interruption was realised, Sir William Cullen and Mr. Justice Sly lay back in their chairs and undisguisedly laughed. The other occupant of the bench, Mr. Justice Pring, also smiled.

## The Little Boy Who Did Not Want To Wash Himself

"LITTLE Boy, Little Boy!" called mother. "It is time to come and wash for dinner."

"Oh, dear!" cried Little Boy, "I wish I didn't have to. I wish I were a pussy cat or a rabbit. They never have to wash at all."

"Do you really think so?" said mother. "I believe you are very much mistaken. But let us go and see what Mrs. Pussy Cat has to say about it." And she started off toward the barn where Mrs. Pussy Cat lived with her children.

When they reached the barn they found her at home in the nest she had made for herself in the hay. And what do you suppose she was doing? She was washing her three little kittens. She took them, one at a time, between her two front paws and lapped them all over until their little white noses and vests were as white as snow and their gray coats as smooth and glossy as they could be, and when she had finished with the kittens she began to wash herself.

"You see how careful Mrs. Pussy Cat is to keep herself and her kittens clean," said mother. "And when the kittens grow a little older she will teach them to wash themselves just as I have taught you. But how much easier it is to keep clean when you have a basin and towels and nice warm water to use! Now, shall we go to see Mrs. Bunny Rabbit?"

Mrs. Bunny Rabbit lived in the brier patch, and when Little Boy and his mother reached there they found her at home. And what do you suppose she was doing? She was washing little Baby Bunny Rabbit.

Baby Rabbit did not like being washed any better than Little Boy liked it. He squealed and squirmed and tried to get



It is Time to Come and Wash for Dinner—

I Wish I Didn't Have to

away, but Mrs. Rabbit put one strong paw over his neck and held him fast and washed him just as Mrs. Pussy Cat had washed her kittens.

Little Boy stood and watched her for a moment, looking very disappointed, and then Mrs. Robin Redbreast flew over his head.

"Oh!" cried Little Boy, "Let us go to see Mrs. Robin Redbreast! She does not wash her children, I am sure."

Mrs. Robin Redbreast lived in the cherry tree near the well, and when they reached there they found that she had flown there ahead of them. She had called her two children down to the wooden trough father had made for the

birds, and was teaching them to take a bath. She would hop into the water and out again until they both learned to do it, and then, when the baths were finished, they shook their feathers dry and flew back to their home in the cherry tree.

"Mrs. Robin Redbreast and her chil-

the very cleanest hands and face you ever saw. And now when mother calls him in to wash himself he comes at once, for he thinks of the birds and the rabbits and the kittens and, of course, he always wants to be as neat and clean as they are.—American Motherhood.



"The Very Cleanest Hands and Face You Ever Saw"

dren have no warm water to wash in," said mother, "but even that does not keep them from taking a bath. I wish my boy would try to be as neat and careful as his little out-of-door friends."

Then Little Boy did not say another word, but ran upstairs to his own room, and in a few minutes down he came with

It is a good thing to have a sweet, low voice. We can all do a great deal towards having it. Do not talk in a loud, rough way. Remember to speak softly and gently. It is more attractive in every way. If you would like to have sweet, soft voices when you are men and women, you must think of it now while you are children.

#### THE CLOVER

SWAYING and nodding gaily With every wind that blows, The happy, red-cheeked clover Down in the meadow grows. The rains but make it fairer, The winds but make it strong; The bees which steal its honey Its fragrance bear along. When stricken by the sickle It rears its head anew, To meet again the sunshine, To drink again the dew The tender hot-house darlings, Shielded from sun and air. May scorn its rosy blossoms, And deem themselves more fair. But all the world is brighter. And all the air more sweet, Because the sturdy clover Grows humbly at our feet. -Ninette M. Lowater.

## Be Observant

A CHILD may know more than a philosopher about some things. A little girl entered the study of Mézeray, the celebrated historian, and asked him for a coal of fire.

"But you haven't brought a shovel," he said.

"I don't need any," was the reply.

And then, very much to his astonishment, she filled her hand with ashes, and put the live coal on top. No doubt the learned man knew that ashes were a bad conductor of heat, but he had never seen the fact shown in such a practical manner.

Two boys of my acquaintance one morning took a walk with a naturalist.

"Do you notice anything peculiar in the movement of those wasps?" he asked, as he pointed to a puddle in the middle of the road.

"Nothing, except they seem to come and go," replied one of the boys.

The other was less prompt in his reply, but he had observed to some purpose.

"I notice they fly away in pairs," he said. "One has a little pellet of mud, the other nothing. Are there drones among wasps, as among bees?"

"Both were alike busy, and each went away with a burden," replied the naturalist. "The one you thought a do-nothing had a mouthful of water. They reach their nest together; the one deposits his pellet of mud, and the other ejects the water upon it, which makes it of the consistency of mortar. Then they puddle it upon the nest, and fly away for more materials."

You see, one boy observed a little, and the other a good deal more, while the naturalist had something to tell them that surprised them very much.

Boys, be observant. Cultivate that faculty. Hear sharply. Look keenly. Glance at a shop window as you pass it, and then see how many things you can recall that you noticed in it.—Southern Churchman.



## PLAYMATES\_



Why did you grow so big, daddy,
With me so very small—
For don't you see that many games
We cannot play at all?

That when we have a circus game
And ride all round the track,
I never can be elephant
With you upon my back?

And when down in the garden, dear,
You swing me very high,
I never can give you a turn
And make you touch the sky?

If you were small, like me, daddy,
In rain we'd splash about
Close under my umbrella till
The lovely sun came out.

Why did you grow so big, daddy,
With me so very small—
For don't you see that many games
We cannot play at all?

-Mary White Slater

## Armageddon!

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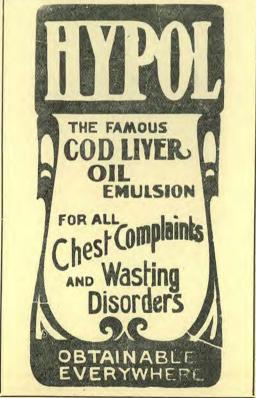
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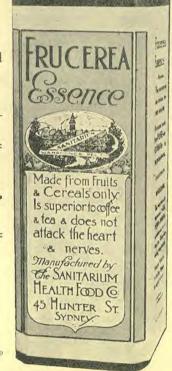
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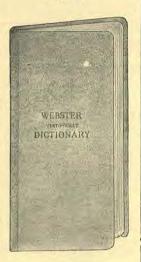
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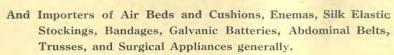
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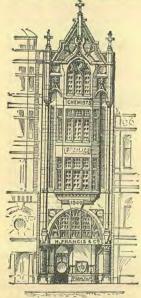
Agents for FRANCIS'S PREPARED OIL for every description of Wounds, Bruises, and Strains in Cattle and Horses. 2/-, 3/6, and 7/-.

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Branch Pharmacy: 111 COLLINS STREET





New Building, 280 Bourke St.

## The Warburton Sanitarium

WARBURTON, VICTORIA



HIS institution has been established for the purpose of treating persons suffering from all kinds of diseases except infectious cases. For those who are "run down" and require a bracing atmosphere or a change of diet, the Warburton Sanitarium is the ideal place. The Sanitarium is well equipped for treating disease by the most modern methods. Maternity and surgical cases receive special attention. Registered by the Board of Health as a Private Hospital.

Send to-day for illustrated booklet and further information to

THE MANAGER, The Warburton Sanitarium,
Mt. Donna Buang Road,

Warburton, Victoria

Telephone 5, Warburton Exchange

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