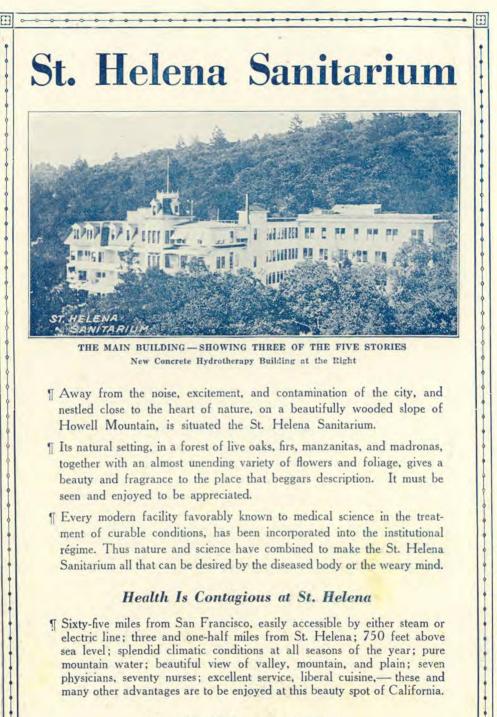
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#### PURLISHED MONTHLY BY THE

#### REVIEW AND HERALD PUBLISHING ASSN., TAKOMA PARK, WASHINGTON, D. C.

Entered as second-class matter June 24, 1904, at the Post Office at Washington, D. C., under the Act of Congress of March 3, 1879

Acceptance for mailing at special rate of postage provided for in Sec. 1103. Act of Oct. 3, 1917, authorized on June 22, 1918.

#### VOL. 35

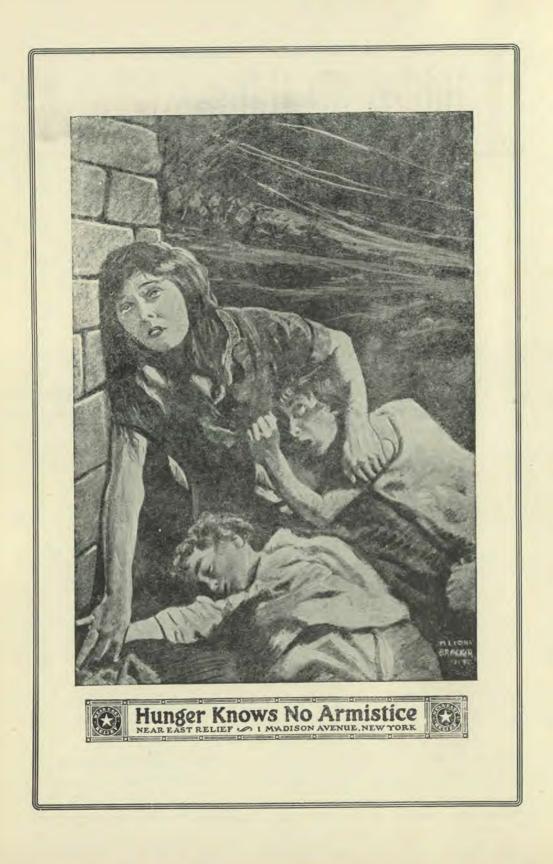
#### FEBRUARY, 1920

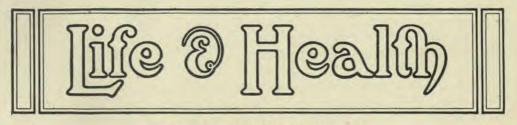
No. 2

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### HOW TO LIVE

EDITORS

L. A. HANSEN

G. H. HEALD, M. D.

VOL. 35

FEBRUARY, 1920

No. 2

# Meeting the Test

EDITORIAL

The world is seeing trying times. This statement applies not alone to one thing of which we might speak, but to many. No one dares seriously to predict when conditions will better themselves. Many there are who, with reasonably good ground, forecast a future fraught with still more perplexity and peril. As yet no foundations seem to be laying for the building of permanent peace and safety for the immediate future.

Such times as these try men. The morale of every one is put to test. Courage shows its true value. Confidence of man in man is tried. Belief in the final triumph of right is tested. Some men are holding tight to their belief in men and things, while others seem lost in uncertainty.

Such times try men's religion. Inspiration comes under the attack of doubt and disorder. What and how much the Bible is to us is in question with some. Faith in God weakens or strengthens. Some men let go their religion, while others find their only safety in deepening the spiritual life.

Such times try our physical endurance. Anxiety and uncertainty in soul tells on the health. Troubled minds affect bodies. High costs of life's necessities mean deprivation to many. Scarcity of food and fuel brings want and suffering. The resistant powers of men, women, and children are determined. Disease and premature death show where there is weakness.

Such times call for earnest thought and wise action. We may not be able to change world conditions, but must face things as they are. We must relate ourselves to men and to things according to their present standing; this may mean new relationships. If times are trying, we must prepare for trial. This calls for re-enforcement of strength and power. What we have been or what we have done in former days will not be sufficient for nowadays.

If courage runs low all about us, we must take heart. It is necessary for ourselves as well as for others that when others talk doubt, we talk courage.

If men are letting go their hold on eternal things, we must tighten our grip. When unbelief is popular, letting go is all the easier. Holding on saves from a great ruin.

If health is breaking under the unusual strain, we need all the more to give close attention to health principles. They have always been in place and have always carried their reward in their observance. Now, more than ever, may the advantages of healthful living be proved.

Health is fundamental to the possession of the qualities so much needed for these times. Sound bodies are necessary for vigorous action. Clear heads and clean minds must be depended on for clear thinking and sound reasoning.

Men that know the mastery of self must make moral fiber that will stand severe test. For most men nothing is more testing than their own appetites and passions, and victory there means victory elsewhere. It is here that most people go wrong, in times good and bad.

A regard for our bodies as the handiwork of God inspires reverence for the Almighty. A sense of his provision for our physical needs gives faith for the keeping of our souls. Dependence upon him for our daily bread leads us to know more the value of spiritual food.

Times of testing are not necessarily days of disaster. They are occasions for bringing to the front those things that count most. They make dominant, if we will let it so be, that which should dominate. They bring out the best that is in us. They make for strength of character. L. A. H.

#### HUNGER KNOWS NO ARMISTICE

The frontispiece, from a painting made especially for the Near East Relief, by M. Leone Bracker, vividly portrays what words fail to express — the horrible suffering of the women and children of Armenia and adjacent countries. Peace has blessed Europe and America for more than a year, but in Western Asia conditions still exist that are more frightful than any war-time experiences of the martyred populations of Belgium and France. Thousands of women and children escaped massacre by the Turkish soldiers only to face the terrible agonies of death by starvation.

Col. William N. Haskell, joint high commissioner by authority of the Paris Peace Conference and representative of the Near East Relief in Armenia, recently cabled to the United States that 800,000 destitute Armenians will starve unless food is provided for them until next year's harvest. He estimates the minimum requirements are 7,000 tons of flour a month and one full cargo of supplies for 150,000 children for Armenia, and \$500,000 monthly for relief in the Caucasus.

The Near East Relief, 1 Madison Ave., New York, is at present the only organization giving aid to these suffering people, and lack of funds still prevents the reaching of more than a small part of the stricken people.

# AS WE SEE IT Conducted by G. H. Heald, M. D.

#### Self-Pity: An Unprofitable Occupation

SELF-PITY is one of the most unprofitable of mental occupations. It is a form of introspection; and introspection — except for the purpose of ridding self of certain faults — is a dangerous operation.

The snail or the turtle does well to retreat within its shell when in the presence of danger — it can do nothing else. But when one's mind, shrinking from the hard actualities of life, recoils within itself and feeds upon itself, it is developing a condition which paves the way for those afflictions — partly mental, partly physical, in their symptomatology — that we call the psychoneuroses. The person who is given to introspection, self-study, communing with self, self-pity, and the like, is either abnormal or is engaging in an activity that is destined to make him abnormal.

When one is inclined to pity himself, he is getting a wrong perspective that reduces his faults and failures, and magnifies his wrongs and hardships. In fact, it tends to make him satisfied with what he has done for himself and to bemoan the fact that others have not done more for him. Instead of spurring him on to make greater effort, it encourages him to continue in his present shiftless ways.

It is when one casts aside all temptation to pity self, realizes his failings, determines to correct them as far as possible, and sturdily resolves to get under the load and play his part well, come what may, that he escapes from the soul-destroying practice of introspection and self-pity.

#### Factors in Long Life

Shown by Insurance Statistics

In studying the effect of certain habits and conditions on the length of life, insurance officials take into consideration not a few scores or hundreds of lives, but millions of lives. For this reason their findings are worthy of great respect. Recently the *American Magazine* published an article by Forrest F. Dryden, president of the Prudential Insurance Company of North America. Mr. Dryden took for his topic, "The Kind of Human Beings Who Live the Longest."

According to Mr. Dryden, insurance statistics show that married men live longer than bachelors, and are freer from certain diseases. He agrees with the writer of Proverbs, who said many hundreds of years ago that "whoso findeth a wife findeth a good thing:" he not only lives longer but lives happier. Statistics are in favor of the man who works *hard* for a few hours, and who allows nothing to interfere with his periods of enjoyment with his family, evenings, Sundays, and holidays.

#### LIFE AND HEALTH

As to the comparative longevity of man and wife, it is found that men of twenty-five are more likely to reach fifty than are their wives of the same age, the difference being caused probably by the risks incident to childbirth. On the other hand, the wife of fifty is more likely to reach the age of seventy-five than her husband of the same age. Just what makes the difference here, statisticians are not prepared to state. Is it because the husband has overworked in his effort to get ahead in the world, while the wife, because of his wealth, is protected from the hard knocks of the world? Or is it because he has learned to speed up in his earlier years, and does not properly adjust himself when he comes to the time when he lays off his strenuous duties?

Mr. Dryden believes there is no better formula for a long and happy life than the observance of the ten commandments. The worst risks, that is, those most liable to die early, are the saloon keepers, who have an extra mortality of 70 per cent. Hotel keepers and all men in the liquor business *except the proprietors of distilleries* (who probably know enough to let their own product alone), have shorter lives than the average. This is the result of a study of 2,000,000 lives in forty-three companies. Decency and temperance pay. The total abstainer outlives the occasional drinker. The occasional drinker, even if he reforms, lives a shorter life than if he had never indulged. This is the cold black-and-white result of the study of these millions of lives, and shows, perhaps as nothing else can show, that even a moderate use of liquor is detrimental.

Mr. Dryden's rules for long life and vigorous health are regular exercise, plenty of sleep, and above all, not so much food. He emphasizes this latter point. "If we were all compelled to hustle for our food as the savages are, we should all come into old age hard and lean and tough as they do. It is the abundance of food, and the ease with which we can get it, that work our undoing," says Mr. Dryden, who finds that cancer is much more prevalent among those who feed well than among those who eat sparingly.

#### The Straining Cloth and Milk Contamination

WHILE the health officer of the District of Columbia was conducting hearings in order to determine the source of the contamination of milk shipped into the District, it was suggested that the straining cloths might be an important source of contamination.

In order to determine this point, there were sent to the dairy farms within sixty miles of Washington trained laboratory workers who obtained from the different dairies, samples of straining cloths which the farmers considered ready for use.

There was great difference in the ideas of the farmers as to what constituted proper preparation of the cloths. It should be stated that in place of the small strainers on milk pails, the dairymen use a large cloth through which all the milk is strained. It is the treatment of this cloth after each milking that constitutes the difference in these cloths as germ transmitters.

On one farm the straining cloths were washed in soap powder after use and hung up to dry. The examination of a cloth so treated (1-100 of a square foot of cloth) revealed the presence of 27,000,000 germs, of which 300,000 were colon germs, indicating fecal contamination. On another farm the proprietor did not know (and seemingly did not care) how the cloths were treated; and 1-100 square foot of cloth in this instance showed 430,000,000 bacteria, of which 6,000,000 were colon germs. This was the worst case found. There were other indications of dangerous contamination. The milk strained through the cloths of this dairy probably went into the District, and brought just as high a price as milk more carefully collected. On another farm, the cloths were thoroughly washed in water containing soda, and boiled after each use. The count in this case showed a total of 6,000 bacteria, and no colon germs.

The Health Department suggests that the cloth be boiled for at least ten minutes, and then instead of being hung up in the air to be contaminated by air germs, that it be placed in a sterile jar, until used, or else that it be boiled just before use.

Meantime the public innocently drinks the milk as it comes to them, and if occasionally there is a violent outbreak of sore throat, tonsillitis, or some other acute infection, or if the baby is laid away in a little grave, it is probably attributed to almost anything but the milk.

#### Acidosis a Condition

#### More Common Than Fever

PROF. L. J. HENDERSON (Science, July 27, 1917) came to the conclusion that acidosis is a much more common condition than is generally supposed. He believes that it is a condition of depletion of the alkali reserve of the body.

He suggests a very simple test for this condition, namely, the administration of soda [bicarbonate] until the urine is amphoteric, or faintly alkaline. Normally this should require from five to fifteen grams. In acidosis the quantity required will be greater.

This test gives a hint of the appropriate treatment, namely, the administration at frequent intervals of just sufficient soda to render the urine amphoteric.

Professor Henderson does not believe that this method is adequate for the severer forms of acidosis connected with diabetes. But in all serious illness, in his opinion, the test for acidosis should be made, "because it is often a very simple matter to repair the defect."

He cautions, however, against the use of too much alkali. Continued rendering the urine distinctly alkaline would soon result in damaged kidneys. In kidney disease especially, alkali should be used carefully so as to avoid a distinct alkalinity of the urine.

> WE live in deeds, not years: in thoughts, not breaths; In feelings, not in figures on a dial. We should count time by heart throbs. He most lives Who thinks most, feels the noblest, acts the best. - Bailev.

MEN deal with life as children with their play, Who first misuse, then cast their toys away.

- Cowper.



# A Novel Health Agency

#### O. D. Foster

W HO has not been amused by the vagaries of medicine venders who tour the country, charming a livelihood from the pockets of the curious who gather about their torchlighted thrones to hear them voice the particular merits of their compounds? And now, in this present startling epoch, we find the American Red Cross nurse resorting to much the same methods, mounting the stump, as the phrase goes, and tooting for hygiene and health.

Over the several Chautauqua circuits of the country the Red Cross nurses have traveled, carrying the message of "a healthier and happier America today and tomorrow," which is the corner-stone of the peace program of the American Red Cross. Most of them had become accustomed to hardship and inconvenience during their years of service overseas. Their spirits were undaunted by having to rise at unseemly hours, to ride in eindery trains, curled up on the seats, with heads pillowed on grips and Red Cross capes.

At the hour appointed for their performance, the long, slowly moving file of people would filter into the great Chautauqua tent. The tenor would sing, most dramatically, "The Rose of No Man's Land," and as he finished, the nurse, in full Red Cross costume, would appear on the stage.

The message she brought was health — health, which every one wants and no one wants to hear about. She did not urge them to obtain it through medicines and cures, but through the simple observation of hygienic principles of living.

Through these novel, yet ancient methods the American Red Cross sought to arouse among the people, especially those living in rural districts where there are no organized health agencies, a desire for and an appreciation of health through the use of the best natural resources.

The speakers said the community nurse was the medium through which public health in rural communities might be attained and retained. They told how these neighborly women play the part of friends to the friendless in lonely rural communities and in the yet more lonely populous eities.

The children present the most promising field for the endeavor of community nurses. By inculcating healthful habits during youth, it is practically assured that the child will keep the same habits through life, thus preserving his own health and bequeathing strong, healthy bodies to his descendants.

For this reason the schoolhouse is ever the favorite haunt of the community nurse. Here the youth of the land are trained for worthy citizenship in a great republic. Toothbrush drills, breathing tests, athletic games, are some of the exercises held by the nurses after the physical examinations in the school clinics are completed. And while these are conducted, the children are given interesting facts in regard to personal hygiene, sanitation, and nutrition.

The children carry the news home, with their characteristic interest in a novel enterprise. Soon the families become interested, and the Red Cross nurse finds opportunity to become the welcome guest instead of the shunned intruder.

When the co-operation of the community is assured, the nurse organizes hygiene classes for the young boys and girls; athletic clubs are formed, that wholesome recreation may be provided. through which the excess energy of the adolescents may be beneficially expended.

Women are especially interested in dietetics and the home care of the sick; this is their special sphere of achievement.

In rural districts comparatively slight accidents are frequently fatal. The distance to a physician's office is often so great that the victim succumbs, or is injured for life, because of delayed medi-



TOOTHBRUSH DRILL

cal attention. Therefore classes in first aid are especially popular in such vicinities.

The importance of first-aid instruction can scarcely be overestimated. The American Red Cross, appreciating this fact, some time ago organized a First Aid Department.

Many people were slow to coincide with the views of organization, but a review of statistics proves the advisability of affording first-aid instruction to all persons, not only in the industrial world, but in the homes.

Within the United States about 100,-000 lives are lost annually through accidents, and about four times that number are permanently injured. Strange to say, about twenty-eight per cent of these accidents occur in the home, so a reliable insurance company stated after careful investigation. Of the 29,684 accidents which occurred in Chicago in 1915, 15,241 were household accidents, a percentage even higher than that mentioned. In 1916, 1,149 persons were killed by falling downstairs and 4,000 others were crippled by like accidents. In Chicago, in 1915, 105 persons died from burns, and in New York 179 died from careless handling of fire, matches, etc. Of all deaths, 9.3 per cent are the result of accidents, and 19.2 per cent of the total number of deaths occur between fifteen and twenty-four.

Innumerable instances might be quoted of the benefits derived from the first-aid classes given by the Red Cross. Persons in a certain rural community learned to appreciate them when a farmer had his hand cut off while threshing. His daughter, a Red Cross first-aid graduate, through her knowledge of first-aid methods, prevented his bleeding to death before the doctor arrived.

The modern health methods of securing long life and good health, advocated by these health evangelists on their medical tours, were eagerly received, appreciated, and put into practice by the people.

The persuasion to employ community nurses in order that instruction in hygiene, first aid, and dietetics might be given to old and young, was punctuated by these startling facts: That 100,000 women die in childbirth every year: that there are 8 babies' graves in the United States to every American soldier's grave in France; that 2,000,000 died of influenza in two years; that every year 200 .-000 die of tuberculosis, a preventable disease; that 1,000,000 school days are lost each year because of measles, by the school children of America; that an average of nine labor days, per capita, are lost each year; that the expenditure for fire and police protection annually is \$2 per capita, and for education, \$8; while that for health is only 29 cents.





# Real Rest a Remedy

withous the second s

#### L. A. Hansen

THIS is an age of hurry, of rush, of feverish excitement. Almost everything runs in high gear, at top-notch speed. The world is living under heavy pressure, trying to keep up with today's pace. Almost everybody is keyed up to a breaking point, gripped by intensity, and trying to hold place in the seething, surging onrush of all things.

This is an age of worry, of anxiety, of nervous fretfulness. The strain of the day's living is telling. Nerves are breaking under the high tension to which they are stretched, for nerves have a limit. An accompaniment of the world's speed-limit living is a great increase of disordered nerves.

Nervousness is a disease. Many persons may not think so and may have little sympathy for those who are nervous. One who has "a case of nerves" is often regarded more as fidgety, fussy, or eccentric, than as one suffering with an actual physical ailment. But nerve troubles are among the most serious ailments, and the least to be made light of, as those afflicted with them well know.

Disease of the nerves does not come without cause, any more than do other diseases. And in general it is not difficult to reason from cause to effect in tracing the growth in rate of nerve disorders. Cause leads to effect, and there is plenty of cause for nervousness. While the cause exists, the effect will be seen. There is no cure for nervousness or for any other disease while the cause remains. Just as long as we work too much, play too much, and do too much

of this, that, and the other, so long will our schedule of living be too much for our good.

Probably there is little good in saying much about getting back to the simple living of former days. Perhaps it cannot be done. Conditions of today require quick movement. We have to step lively if we want to get anywhere, or even to keep from being run down by those who are rushing by us. Even crossing the street calls for haste. Going against the crowd is a task.

Present-day conditions call for a crowded day. Every field of activity, — business, industrial, educational, social, domestic, and, we may even say, religious,— demands hard and close attention. As a rule we try to get too much done in a day. Our scale of quantity production is set high, for the time we are able to work; and then we put into the rest of the day about all the entertainment or excitement we can stand.

The trouble is we cannot stand this sort of program. We break under it. Actual working time is cut down, because of sick-leave, and a cut is seen in what we are really able to produce. The quality of our work shows even worse. Sick people, nervous people, cannot do full work or good work.

What can we do? We can cut down on the number of things we try to do; much of our hurry and worry comes from trying to do too much. Some things must be done; some might be omitted, and some better not be done at all. Most of us can probably trim our program considerably and not hurt it one bit. If we include only the real essentials of life, we shall see a substantial reduction in it, and a great improvement.

The worth-while things of life give first place to those which make for health. Those things that injure the health or interfere with its development fall into a class that should be adjusted to fit health conditions, or should be eliminated altogether. Those that interfere with rest, that disturb the sleep, are of this kind. Social functions that put one on a strain would better be omitted. Amusements or entertainments that stimulate one to stretch the day into hours that should be used for rest, should be omitted. A certain amount of relaxation, recreation, or play is necessary to a well-balanced program, but there is a balance to observe.

For women who are nervous it may be necessary to make some adjustments in the housekeeping, which does not always mean home-keeping. Many things may be included in woman's work which is "never done," that do not have to be done. Not to try to specify what might go undone, for no woman would allow that, we may say that if first things are put first, some other things must and will be left by the average nervous woman. A little period of rest every day will take the place of something else. By a little planning one can so arrange her program that the constant round of cooking, dishwashing, baking, washing, ironing, sewing, etc., which is so irksome in its monotony and never ending in its wear and tear on the nerves, will admit of some variation and relaxation.

Slaving for the family all day,— caring for the house, and furniture, and clothes, and food,— until too tired to be pleasant with the family when night comes, is a mistake. Overworking from morning till night, draining the energy, and thus failing to give one's very best to others, is wrong to all concerned. The happiness of the home is of greater concern than merely their housekeeping.

Worry and fretting go with nervousness, but in a great measure may be stopped by just stopping them. While the condition of the body has much to do with the state of mind, it is also true that the mental state affects the whole being. The nerve centers of the brain modify greatly the nerve impulses, of feeling and motion, traveling to and fro over the nervous system. Physical changes are effected by varying mental attitudes, in the circulation, in respiration, and in digestion.

Our thinking has much to do with our bodily state. Despondency is depressing to health; worry magnifies little things, makes trials look bigger, borrows trouble, and causes anxiety over things that do not exist and that never will exist. Fretting makes life harder, for ourselves and for others; it grows like any other habit, and becomes more and more difficult to overcome.

The antidote for worry and fretting is cheerfulness. Good cheer is a real medicine, a real health measure, a remedy for many ills and evils. It belongs to the healthy home. It helps in all pursuits. Work is made lighter by it, and hard tasks are the better accomplished. If the day is a crowded one, all the more need for putting cheer into it.

But real joy cannot be forced. It is a thing of the soul, a fruit of the Spirit. Real rest comes not by mere thinking. Genuine peace may be had for the taking, but it has but one Source. It is ours to enjoy; but we must receive it, and that means to receive its Giver.

There is no cure for the unrest of the world but the cure that Jesus Christ offers. Contentment will not be found in the things of this life, and the more strenuous our seeking after it, the more discontent shall we find. Gratification of appetite is never full. Desire for wealth is never appeased. Love of pleasure is never satisfied. Fame or honor are never great enough. "A man's life consisteth not in the abundance of the things which he possesseth."

We may seek rest in change of surroundings or in a different climate. Some good may come of it, but if the trouble is in our own lives, we cannot get away from it by far traveling; we merely take it with us wherever we go. Peace of soul is not found in external or material things, far or near.

Neither will abiding peace — true rest — come by denying the existence of sickness and suffering, sorrow and distress. Mental narcotics do not do away with sin and disease. Artificial thinking is not the remedy for real evils. The wonderful powers of the mind were not given to be spent on fighting phantoms. Not only imaginary enemies but formidable foes are to be conquered. The Bible bids, "Gird up the loins of your mind."

Vigor for the mind, health for the body, tone for the nerves, are in good part attainable through a proper mental grasp of life's real needs, purposes, and privileges. A recognition of one's personal blessings and benefits can work wonders for almost any invalid. Let praise, gratitude, and joy take the place of complaining, melancholy, and gloom, and improvement will at once be seen.

Talking cheer and courage is a help; and if that is too much to do, refusing to talk discouragement is a benefit. Giving expression to our feelings strengthens them. Counting our blessings is a good way of seeing them increase. Telling how bad we feel, how poorly we slept, how long we have been sick, and how much longer we know it will be before we get well, will only make things worse.

No element of unrest can be more powerful in its influence on body, mind, and nerve than the consciousness of wrong-doing. No phase of rest is more helpful than the peace that comes from knowing we are right with God and man. The joy of joys belongs to the soul that is forgiven all its sin. Nothing else then matters much. Fundamental, then, to the cure of nervousness, worry, fretfulness, and all unrest is the promise of Jesus, "Come unto me, ... and I will give you rest."

Late Winter Cautions

G. H. Heald, M. D.

N the North, the dangers incident to the late winter are those due to dry heating, insufficient ventilation, and an unbalanced dietary. During the summer months, a variety of fresh fruits and green vegetables at comparatively moderate prices, and the facilities for exercise in the open air and sunshine largely compensate for such disadvantages as accompany the increase in germ and insect development. But in the South,- at least in parts of the South,the dangers from mosquito growth are greatly enhanced in summer, and the winter disadvantages, on account of the mild winters, are not so apparent. Nevertheless, it is in the South, particularly, that the late winter diet apparently helps

to prepare a soil favorable for the development of pellagra, which usually manifests itself by fresh outbreaks in the early spring.

The question whether pellagra is an infection is still unsettled. There are certain facts which point strongly to the theory of infection. On the other hand, the evidence that a faulty diet is an important contributory factor is overwhelming. One thing is certain: Not every one who is on such a one-sided diet as is supposed to cause pellagra contracts the disease. Moreover, the manner in which the disease advances through towns indicates some slow form of infection. And yet the infection seems to implant itself by preference on

those whose body defenses have been impoverished by an ill-balanced diet and unhygienic living conditions, though there are cases of pellagra among the well to do, where one would not expect to find a one-sided diet.

It is a significant fact that pellagra develops in the spring, just after the period of greatest impoverishment of the diet. It is true, the skin affections on exposed parts seem to suggest the effect of the increasing sunlight on skins made tender by the comparative indoor life of winter; but this skin eruption is not the only symptom, nor is it the primary symptom of pellagra. To the extent that the sunlight helps to produce a roughened and inflamed skin area, it does it upon a body already disordered by the pellagra poison — whatever that may be.

For practical purposes, then, let it be understood that pellagra attacks those who are on an unbalanced diet - a diet which, though ample in bulk, is impoverished because of the lack of certain essentials. Particularly noticeable in the diet of pellagrins is an excess of starchy foods, the cereals and bread - especially the milled cereals such as white flour and bolted cornmeal - and the lack of milk, green vegetables, and adequate proteins. The diet of the pellagrin is not always the same, but so far as investigated, it is always lacking in certain essential food elements. And these elements are most likely to be deficient in the diet in the late winter months.

For this reason it seems evident that there is an unusual tendency at this period of the year, either because the foods are unobtainable, or because they are unduly expensive, to do without certain essential food ingredients, and that in many cases the result of this unbalancing of the diet is disastrous.

The lesson to be learned is that if it is necessary to economize, it is better to make the economies elsewhere — in the elimination of tea, coffee, tobacco, liquor, and other harmful or useless indulgences, rather than in economizing on the lifepreserving foods — milk, whole-grain preparations, and green vegetables.

In view of the fact that one can buy the whole wheat and the whole corn at rates reasonable in comparison with their products, and grind them fresh at frequent intervals, there is no good reason why one should live on foods composed of white flour and bolted cornmeal. One reason why it is impossible to get the whole-meal preparations is that the germ of the grain decomposes quickly, and such meals quickly lose their salability; but with the hand mill, one can make his own meal fresh, and have the advantage of the whole grain without the danger of having it spoil.

Whether one lives in the regions where pellagra is prevalent, and where some infective agency is probably present, or in regions where there is no pellagra, it should be realized that a one-sided diet, no matter how bulky or how abundant in cereals and other cheap foods, is the cause of grave disturbance of the body nutrition, and should at all hazards be forestalled by a more adequate diet.

Another tendency of the late winter, especially in the North, is to neglect fresh air and outdoor exercise. The days being short, there is no light before or after work hours, and the tendency is to spend the larger portion of this time housed up indoors in stuffy rooms. In fact, a very little of the twenty-four-hour period is spent in the open air. For this reason the open-air sleeping porch is to be highly commended. It is more frequently used in the summer months when one naturally gets a fair amount of open-air life in other ways; but in winter, when there is less to call us into the open, when we need more than at any other period of the year the influence of the sleeping porch, we are likely to take to the cosy bedroom.

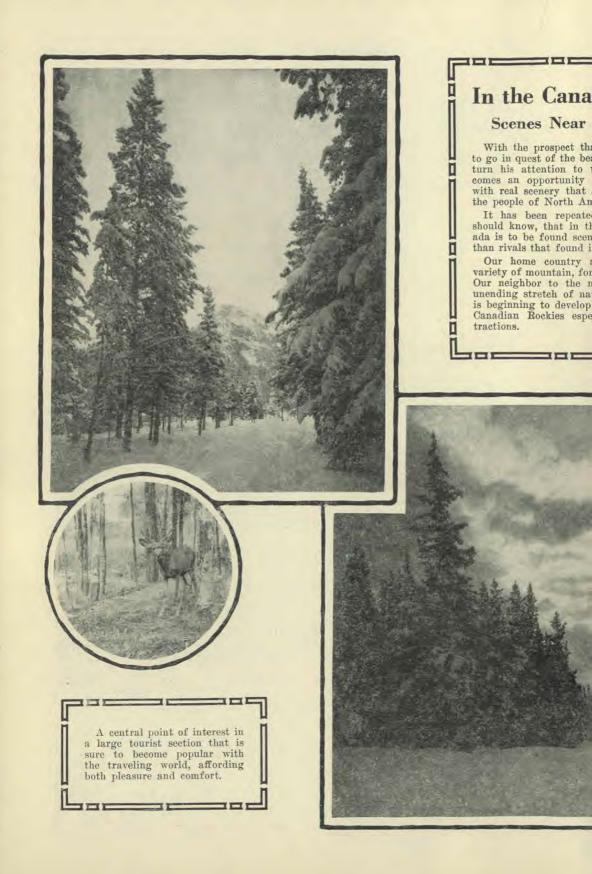
This article is not a plea for the practice of asceticism. One should not shiver and freeze in a clammy bed on the porch. By means of hot bottles or hot bricks, the bed should be made comfortable, and there should be sufficient covering over and under for protection; and it may be better to sleep between woolen blankets. In the more severe climates, it may be advisable to sleep in a sleeping bag. In any ease, it is possible to be comfortable on a porch the coldest nights, provided proper preparation is made. Men manage to sleep in comfort in the arctic winters, and it can be done here. If such sleeping brings renewed life to the consumptive, what may it do for the ordinary person who is suffering from nothing worse than the results of bad air?

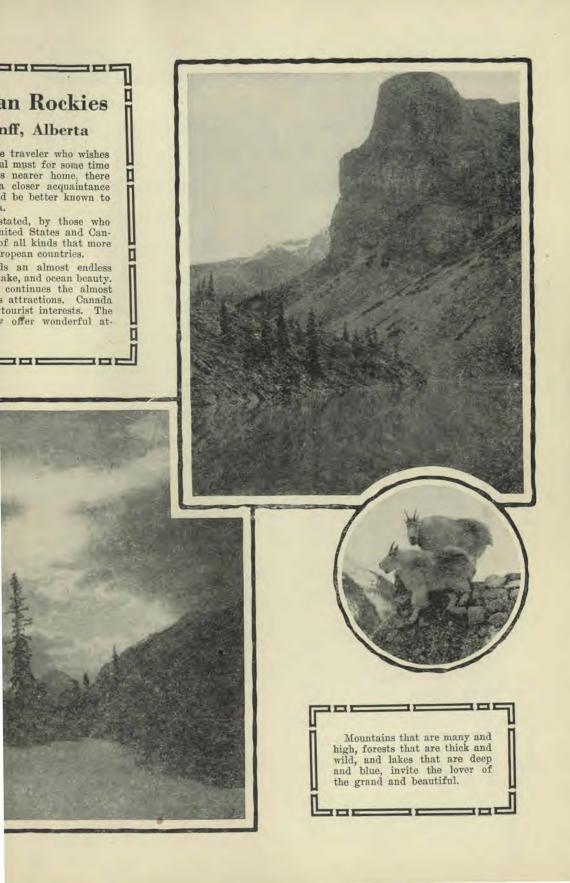
It should not be forgotten that not only tuberculosis, but many of the modern ills are the result of bad housing conditions, and were unknown to those who habitually lived in the open.

Another winter ill: Most houses in winter are as dry as Sahara. The cold air, being heated, has its humidity, or moisture, reduced down to 12 or 15 per cent when it should be for our best health, at from 60 to 80 per cent. Shrinking furniture, open cracks in the floors. and other things indicate that this dry air acts as a blotter, abstracting water from everything it touches. The skin becomes dry and parched, the nostrils may crack and bleed, the air passages become irritated, and there is increased tendency for the contraction of infectious diseases of the air passages. For this reason, there should be ample provision for the escape of moisture-steam or vapor - into the air, either by the use of a pan of water on the stove, or by means of vessels of water in connection with the radiators or registers.

Another ill is deficient ventilation. It seems almost impossible to ventilate some rooms without causing unpleasant drafts. This can be obviated by using a sash something like a window screen, but with muslin instead of wire screen. Such a sash placed in the lower part of the window opening, just as a screen is sometimes placed, will allow a free interchange of air without drafts.









# Dietetics

Food: Its Composition and Uses

George E. Cornforth

THE following is a list of the mineral elements needed by the body and the foods that supply them:

#### **Mineral Elements**

- Iron Spinach, water cress, dandelion, egg yolk, lentils, peas, beans, strawberries, gooseberries, prunes. Phosphorus Whole cereals, bran, legumes, milk, egg yolk, nuts. Potatoes, turnips, parsnips, cab-Potassium bage, plums, cherries, legumes, peanuts and other nuts. Caleium Milk, egg, whole cereals, bran, nuts, legumes, celery, cabbage, oranges, lemons, grapefruit. Whole cereals, bran, spinach, le-Magnesium gumes, apples, cherries, figs, raisins, turnips, peanuts and other nuts.
- Sodium Salt, spinach, asparagus, cauliflower, apples, strawberries, leeks, radishes, eggs. Chlorine Salt, spinach, bananas, milk, cel-
- ery, cocoanut, eggs, potatoes, turnips. Sulphur Egg yolk, spinach, cauliflower,

	cabbage, legumes.
Fluorine	Whole cereals, bran, vegetables.
Silica	Oats, barley, onions, cabbage.
Iodine	Present in fish.

I have not been able to learn what vegetable foods contain iodine. It is found in seaweeds, and must, therefore be contained in Irish moss (used in making blanemange), vegetable gelatin, or agaragar, and dulce. No doubt land plants used as food also contain it. It is needed by the thyroid gland.

Iron is necessary for the production of red blood. Red blood is impossible without it. Hemoglobin, the red coloring matter of the blood, is an iron compound. Chlorophyl, the green coloring matter of green leaves, is an iron compound. Spinach contains more iron than does any other food. Milk is deficient in iron; therefore, if milk makes a large part of the diet, care should be taken to include other foods that are rich in iron.

Phosphorus is necessary for the building of bones, brain, and nerves. Thought would be impossible without phosphorus. Phosphorus is perhaps best supplied by the bran cereals.

Calcium is necessary for building bones and teeth. The teeth of children fed largely on white bread, meat, cake. and candy, decay early, and such children are liable to contract bone diseases. Calcium is contained in considerable quantity in whole cereals, but not in sufficient amount to supply the needs of the system. Milk contains more calcium than does any other food. Milk contains more lime than lime water. Upon reading this statement, some reader may wish to ask why lime is sometimes added to milk. The answer is that the lime is not added to the milk to make up a deficiency in the milk, but to prevent the milk from forming large hard curds in the stomach, and thus make it more easy of digestion. Nuts also contain an abundance of lime. Therefore the lack of lime in cereals may be balanced by milk or nuts, just as milk and nuts balance cereals by supplying a large proportion of fat and protein, in which cereals are deficient. If the system lacks lime, the natural way to supply it is to drink milk rather than lime water, because the lime in limewater is not organized lime. If the person fears he will become too fat, skim milk may be used; and if even then

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there is fear of taking too much nourishment, whey may be drunk, because the whey contains lime.

There is a suspicion that a lack of calcium in the diet may predispose to tuberculosis. The diet of most American people is decidedly lacking in calcium because it consists so largely of white bread, sugar, and meat. It is therefore not surprising that so many people have tuberculosis, or have had it at some time in their lives. The suggestion that a lack of lime in the diet predisposes to tuberculosis, would explain why milk and eggs, being so rich in lime, are a good diet for tuberculosis patients; and perhaps tuberculosis might be treated with even a greater degree of success by using foods rich in lime that do not contain such an excess of protein to burden the system, as nuts, whole cereals, celery, cabbage, citrous fruits, and broths made from cereals and from lime-containing vegetables in such a way as to extract as large an amount as possible of the mineral elements in the vegetables.

Potassium is necessary for the construction of the cells of the body. Seurvy has been attributed to a lack of potassium, and men who have studied cancer and skin diseases for many years, suspect that a lack of potassium in the diet predisposes to these diseases. Potatoes contain a large amount of potassium. Potatoes, then, may possibly act as a preventive of cancer.

Magnesium, more than any other element, acts as a laxative, and foods containing more of this element are likely to be laxative, while those in which it is lacking are likely to be constipating.

Sodium is necessary for the proper constitution of the fluids of the body. It is supplied by common salt and by many vegetables and fruits.

Sulphur is one of the constituents of proteins, and therefore is necessary for the construction of the living tissues of the body.

Fluorine and silica are needed for the teeth, bones, hair, fingernails, and whites of the eyes.

Raw foods contain substances very necessary for health which are destroyed, or made somewhat less efficacious, by cooking. These substances seem not only to have a beneficial effect upon the general health, but to arouse or increase the activity of the digestive juices. Raw foods are most rich in vitamines and mineral matter. For this reason some raw food should be eaten every day, or better, at every meal. It is well to eat raw all foods that are digestible raw, as celery, lettuce, cabbage, nuts, and fruits; even raw carrots and turnips, chopped fine, make a very appetizing salad, and are more easily digested than the cooked vegetables.

A moment's thought will lead one to perceive that something valuable must be destroyed by cooking. Just think for a moment of crisp, fragrant, appetizing, delicious celery, then think of stewed celery. Cooking destroys all the characteristic flavor of celery, so that cooked celery seems like a different vegetable. Compare, in the same way, fresh and cooked sträwberries, raw apples and apple sauce. These comparisons suggest to us the suspicion that some decided change, or loss, must be occasioned by the cooking process.

Fruit acids are valuable in the diet for their cleansing and germicidal properties; and, contrary to a prevailing opinion, they increase, instead of decrease, the alkalinity of the blood. People who have rheumatism sometimes believe that they should not eat acid fruits. while the truth is that acid fruits are good medicine for them. In fact, fruit juices and raw fresh vegetables are nature's medicines, blood purifiers, and tonics, as far as anything taken by the mouth can serve these purposes. Of course, there are other things that help to purify the blood, as exercise in the fresh air; and cool bathing applied in such a way as to suit the physical condition of the individual, is one of the best tonics.

Cellulose, the indigestible portion of food, is needed in the diet to give bulk to the food, stimulating the digestive tract to pass the food along by tickling it into activity, and, by distending the bowel, giving it an impulse to contract.

It may seem strange to some that we should suggest eating anything indigestible, because the word "indigestible" suggests indigestion. But the fact that cellulose is indigestible is the reason we need to eat it. The word "indigestible " is applied in two ways: (1) To food which tends to cause digestive disturbance, or "indigestion;" (2) to food which passes through the intestinal canal without being acted upon by the digestive fluids. It is in this latter sense that cellulose is indigestible. The diet should contain some indigestible matter for the same reason that roughage is fed to stock. The lack of indigestible matter in the food is responsible for the fact that constipation is almost universal among those who live on the diet of civilized people. People who live on foods as nature supplies them, without removing the cellulose, are not troubled with constipation. Constipation, appendicitis, decaying teeth, cancer, and tuberculosis are diseases of civilized people, not of people who do not remove the cellulose and mineral elements from their food, and who do not live on too concentrated food.

Apparently these very important parts of our food have been considered fit only to be fed to cattle, pigs, horses, and chickens, so we have refined them out of *our* food, and fed them to farm animals, thereby developing magnificent specimens of stock, while our own health has suffered decidedly from the lack of these elements.

The interior of our anatomy needs a daily scrub as well as the exterior. We may call the cellulose in food the broom of the food canal which sweeps it out and keeps it clean.

 $\begin{array}{c} \text{Cellulose} \\ \text{Mineral elements} \end{array} \right\} \text{keep} \left\{ \begin{array}{c} \text{the body clean} \\ \text{the blood pure} \end{array} \right. \end{array}$ 

The following foods are lacking in cellulose: milk, eggs, meat, white rice, white flour, and sugar, and the foods made from white flour and sugar, as white bread, pies, cakes, puddings, and confectionery. When the diet consists almost wholly, or even largely, of such foods, constipation must follow. The foods that supply an abundance of cellulose are fruits, vegetables, whole cereals, bran, and flours made from whole cereals. People who are constipated would do well to eat two or three rounding tablespoons of bran at each meal.

A further study of foods in their relation to health will appear in the next issue.





# Recipes

George E. Cornforth

#### **Baked Macaroni**

- 3 cup macaroni.
- 1 cup cottage cheese.
- 2 hard-cooked eggs.
- a cup milk.

1 tablespoon cooking oil.

11 teaspoons salt.

- 1 raw egg.
- 4 clove garlic.

Drop the macaroni into two quarts of boiling salted water and boil till it is tender. This will require about onehalf hour. (If the macaroni is not cut into small pieces, it should be broken into inch-length pieces before cooking.) When the macaroni is tender, turn it into a colander to drain off the water. Beat the raw egg, then mix with it the milk, cottage cheese, oil, salt, garlic, chopped hard-cooked eggs, and the cooked macaroni. Put into a baking dish, sprinkle with crumbs, and bake till set.

#### Cabbage and Sweet Pepper Salad

1 pint cabbage, cut fine.

- 1 small sweet bell pepper, chopped.
- 1 teaspoon salt.
- About # cup salad dressing.

Mix ingredients lightly together.

#### **Economical Salad Dressing**

- 2 level tablespoons cornstarch.
- 1 cup salad oil.
- 1 egg.
- Juice 1 lemon.
- 1 level teaspoon salt.

3 cup hot water.

In the inner cup of a double boiler mix together the cornstarch and oil, then beat into this the egg, then the lemon juice and salt, and lastly stir in the hot water. Set the inner cup of the double boiler into the outer cup, and cook the mixture, stirring it with a batter whip, till it thickens. Then set the inner cup into cold water, and stir the dressing till it has cooled somewhat. Do not cook the dressing so long that it curdles.

#### Apples Stuffed with Raisins and Nuts

Select sound, ripe apples of uniform Wash them, and with an apple size. corer remove the core from the blossom end, not cutting through the apple. Fill the apples with a mixture of two parts of raisins to one part walnuts or filberts, chopped together by grinding them through a food chopper with the finest cutter. Place the apples in an agate baking pan, sprinkle with sugar, pour a little water into the pan, and bake till the apples are tender. When done, the juice should be nearly evaporated, thick and rich. Serve hot or cold, plain, or with cream or whipped cream.

#### Chili Sauce

14 quarts tomatoes.

- 2 onions.
- 2 green sweet bell peppers.
- 2 canned pimentos.
- ‡ cup brown sugar.
- 10 bay leaves.
- 1 cup lemon juice (about three lemons).
- 21 level teaspoons salt.

1 level teaspoon thyme.

Use either canned or fresh tomatoes. If fresh tomatoes are used, they should be scalded, peeled, and pressed solidly into the measure. Peel the onions, and wash and remove the stems from the peppers. Grind the onions, pimentos, and peppers through a food chopper. Add the tomatoes, bay leaves, and sugar. Cook over a slow fire, stirring frequently till the mixture becomes somewhat thickened. Add the salt, thyme, and lemon juice.

Try this chili sauce with baked beans or with cottage cheese.

# The Arrest of Pulmonary Tuberculosis G. A. Roberts

HE arrest of pulmonary tuberculosis depends very largely upon the regulations of the daily régime. Medicines there are without number that are supposed to cure this disease, but no medicine has yet been found that is dependable enough to warrant its general use as a preventive or cure to the exclusion of other general health measures. On the other hand, attention to general health measures will improve or cure cases not too far advanced, without any medicine whatever, though some of the simple digestants and correctives may be employed with most excellent results.

The assimilation of proper food and water, a continuous and plentiful supply to the blood of pure air day and night, and the complete equalization of the circulation will bring as much improvement as is possible by any method.

As to food and its assimilation: A plain simple old-fashioned diet of fruits, grains, vegetables, eggs, with ripe olives, nuts, and milk will constitute a diet that in most cases will be assimilated without trouble. Such a diet, using the equivalent of ten English walnuts, ten olives, two eggs, and one or two quarts of fourper-cent-butter-fat milk a day, in addition to as coarse vegetables as the stomach can handle without distress, will furnish all the necessary elements needed by one suffering from pulmonary tuberculosis. These foods should be used as follows: Sweet fruits, grains and milk, one egg, five nuts, and five olives for breakfast; coarse vegetables, cooked and raw (the raw to be such as celery, lettuce, cabbage), one egg, five nuts, five olives, and milk for dinner; fruits,

grains, and milk for supper. Bread, butter, honey, and olive oil may be taken with any meals. No food should be swallowed until it has been thoroughly masticated. If there is a real thirst at mealtime, water may be taken and will prove beneficial. Unless there is a real thirst, the habit of drinking with meals should not be formed. If water is needed, drink it as at any other time, but do not take a swallow with food in the mouth. A glass of hot water drunk just before eating, will aid those who have poor digestion. This should not be so hot that it must be sipped, but should be just hot enough so that it can be drunk down without discomfort.

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As to a continuous supply of pure air to the blood: While deep, vigorous breathing for a short time as an exercise is often very dangerous in such cases and should not be indulged in, yet a moderately deep breathing is positively essential, and should be cultivated and practised until it becomes fixed, so that it will be natural and will continue during sleep.

A canvas folding or swinging chair, or any other device that doubles the body forward, and rounds the back by pushing the shoulders forward, should be avoided, for such a posture will prevent the passage of air to upper and lower portions of the lungs. The patient should select a good straight or slightly curved rocking chair for rest, and a good level bed that does not sag for sleeping.

Air that has been purified by bright sunlight is an undoubted aid to recovery and should be sought even at the expense of a change of climate. In the effort to get sun-pure air, one should not sit near (that is, very near, as tilting the chair back against) even the sunny side of a building, as the breeze passing a building usually creates a draft next to the wall. Sun-pure air in motion is good, but drafts on the back of the neck are not. It is not good practice to roll up the sleeves or open the neck of the shirt or dress in order to obtain more air on the skin. Dress according to the climate, and make as few unusual changes in the mode and as few unusual exposures of body surfaces as possible. An air or sun bath to the entire body will not give a cold, while unusual exposure of even a small portion of the body usually will.

As to an equalized circulation: The blood is the life current, and even a healthy man cannot retain his health if the blood current is seriously and continuously disturbed; much less can a diseased person recover if the blood is chilled in its course or seriously and continuously disturbed. Most persons with this disease in the second and third stages have cold hands and feet constantly. As a result there is returned to the digestive, excretory, and circulatory organs and channels chilled blood. This alone will seriously interfere with digestion so that recovery is much more difficult, or impossible. No person with this disease should be satisfied if he finds his hand cold when he puts it in his breast, or if, on going to bed, he finds his foot cold when he puts it up on his other leg. At any cost of money or effort, the feet and hands should be kept

as warm as the rest of the body day and night. A gallon stone jug well wrapped with ten or fifteen newspapers and filled with boiling water, placed in the center of the bed under the covers about an hour before retiring, will not only impart a gentle warmth to the entire bed for the whole night, but will furnish in the morning very hot water for drinking, shaving, or washing. It is a miniature hot water plant, and can be used in a tent or any other place. It should be available to the outdoor patient at all times for warming hands and feet.

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To try to keep the hands and feet warm by sitting near the stove is not good, in that while the hands are being kept warm the floor is usually cold, thus chilling the feet; at the same time hot air is being taken into the lungs, thus increasing any congestion of the lungs that already may exist.

Vigorous exercise is no more indicated when fever is present with pulmonary tuberculosis than when one is suffering with other fevers. Mild systematic exercise may be taken up when the fever has fully subsided. One should not cease his efforts for recovery till he has regained his normal weight, by using a diet that furnishes the proper food elements, and until at least six months have been employed in regular daily labor without a return of fever or a loss of weight.

These methods have proved successful in a large number of cases covering a period of four years.

Kingston, Jamaica.



# The Common Infectious Diseases

HE following tabular information regarding the commoner infections is valuable for ready reference, and should be preserved for that purpose:

#### Chicken-Pox.

Age	All ages, especially children.			
Most Prevalent	In spring and autumn, and during epidemics.			
Mode of Infection	Mouth spray, and erust from sores.			
Incubation Period	Usually from sixteen to eighteen days.			
Symptoms	May begin with feverishness. On second day small pimply rash; next day filled with fluid. This fluid becomes pus, then the spot			

dries up and the crust falls off. There is often successive crops of rash until the tenth day. A child is considered to be free from danger of infecting others when the skin becomes normal. Before permitting the child to return to school, examine the head for overlooked spots.

#### Diphtheria

All ages, especially children.

- From October to December, and during epidemics. Prevalent
  - Mouth spray; discharges from nose, mouth, and ears.
- Incubation Usually two days, but may be as many as ten.
  - Insidious in its onset which may be rapid or gradual. Throat is sore. The lymph glands in the neck around the angle of the jaw are swollen, and there may be grayish white patches at the back of the throat, on the tonsils or palate. There is great weakness, though in some cases, possibly as infectious as others, there may be scarcely any symptoms.

Age

Most

Mode of

Infection

Symptoms

Period

Prevention This disease is almost absolutely preventable, or its effects very greatly mitigated, by the early and sufficient use of antitoxin; and even after an attack has begun, the early use of liberal doses of antitoxin is almost a certain cure. It is certain in proportion to the promptness with which it is given, and the dosage. In any case of doubt it is much better to give the antitoxin than to take the chance.

Remarks This disease is only diagnosed with certainty by laboratory methods, but most communities have health departments where tubes and swabs may be obtained for making throat cultures for diagnosis.

#### Erysipelas

Usually after forty years of age. May occur in surgical and postpartum cases. Also in children.

Most In spring. Prevalent

Age

Remarks

Age

Most

Prevalent

- Mode of Inoculation of wounds usually, though it may occur by con-Infection tagion from another patient.
- Incubation Three to seven days, usually three. Period
- Symptoms Redness of an area of skin with sharp raised border, and smarting pain. There may be high fever, with delirium. The affected skin may be shed later.
  - This condition is dangerous for old people and chronic alcoholics; also in case of pregnancy. The condition may be infectious as long as the skin is peeling.

#### Influenza

- Any age; varies with the epidemic. In some places it takes by preference the elderly people. The epidemic of 1918-19 in this country took chiefly those in the prime of life.
- The epidemic form may be preva lent in any period of the year.
- Mode of Mouth spray, and discharges from Infection nose and mouth, possibly from other discharges.

Incubation Brief. Period

Symptoms Similar to common cold. Begins with chilliness, or possibly a distinct chill. General soreness.

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pains in back, legs, and arms, watery eyes, sore throat, cold in head, loss of appetite, prostration, temperature rise to 100° or 101°.

Keep patient in bed, flat on back,

and warm. No exceptions to

Prevention of Complications

Remarks

this rule for any reason. Influenza is apparently a disease which exists in two forms, one affecting individual cases here and there, and the epidemic form, which in periods of twenty or thirty years passes pretty much around the world.

#### Measles

- Age Chiefly young children. May affect adults and is then liable to be severe.
- Most In June and December. The epi-Prevalent demics vary in severity.
- Mode of Mouth spray, and discharges from Infection nose and mouth. It is probable that the scales have nothing to do with transmitting the disease. Incubation Ten to twelve days.

Period

Symptoms

- oms Begins light, very much like a cold in the head, with sneezing; discharges from the nose; eyes inflamed and watery. About the third day small groups of spots appear, first on the forehead and face. The rash varies with the temperature. The redness of the skin is quite marked when it is warm, and may not be noticeable when it is cold.
- Remarks The after-effects of measles are often severe.

Measles (German)

Age All ages, rarely in infancy; 75 per cent of cases before fifteen.

Most From March to June.

Prevalent

- Mode of Mouth spray, and discharges from Infection nose and mouth.
- Incubation Usually from ten to twelve days, Period but some contract disease within three or four days after exposure.
- Symptoms Usually mild. The onset is sudden. The glands back of the ears are enlarged. The rash is often the first thing noticed. There is no cold in the head. There may be feverishness, sore throat, and inflamed eyes. Rash has some resemblance both to measles and to scarlet fever.

rks The after-effects of German measles are very slight. The only danger is that occasionally a ease of scarlet fever may be mistaken for German measles, and for this reason it is safer to preserve strict quarantine.

#### Mumps

- Children usually. Five to fifteen the most common age.
- Mode of Mouth spray, and discharge from Infection nose and mouth.

Incubation Average fourteen days.

Period

Age

Most

Prevalent

Period

- Symptoms There may be sudden onset, with illness and fever, and pain at the angle of the jaw. There is a swelling and tenderness of the glands, jaw becomes stiff and
  - the saliva sticky. Usually taking acid into the mouth increases the pain.
- Prevention Isolation of patients and sterilization of all dishes, etc., used by patient.
- Remarks One or both glands may be infected. If both are infected, the person is usually immune for life. The disease may be transferred from the salivary glands to other glands of the body with very severe effects. For this reason patients with mumps should remain quiet and not make any unnecessary exertion. While this disease is usually counted harmless, it is very painful and is extremely infectious. Therefore, those who have it should be strictly isolated.

#### Pneumonia

Any age; particularly old people. In spring and winter.

Mode of Mouth spray, and discharges from Infection nose and mouth. Very frequently one is infected from the germs in his own mouth, as a result of extreme temperature or undue exposure. Follows other infections, as influenza, colds, etc.

Incubation From two to three days.

Symptoms High temperature; flushed face; rapid respiration; rusty or bloody sputum; sometimes shortness of breath; cyanosis; delirium. Croupous pneumonia may terminate suddenly in from

Age Mode of seven to ten days, or even earlier. In catarrhal pneumonia, whether it ends fatally or in a cure, the process is more gradual.

#### Scarlet Fever

- All ages, especially children four to seven years.
- In November and December, and during epidemics.
- Month spray, discharges from nose and mouth, and from the ears, from desquamation, also from suppurating glands. Infection may also be conveyed by milk.
- From one to seven days; usually from two to four.
  - The onset may be sudden. Sore throat; feverishness; headache; frequently there is vomiting. A finely spotted, bright red, evenly diffused rash usually appears within twenty-four hours, first on the neck and upper chest, whence it spreads to other parts of the body, though the skin about the nose may be entirely free from rash. The rash lasts from three to ten days, then fades and the skin peels off in scales, or even in large flakes. Scarlet fever is dangerous both during the attack and from complications, which may occur afterward. Persons with a light attack, may give it to the next person in a severe form, so it is important to isolate even the mildest cases, the so-called scarlatina.

#### Smallpox

Any age if not vaccinated. Age In spring and autumn, and during Prevalent epidemics.

Probably mouth spray, and all dis-Infection charges and particles of skin and scabs.

Incubation Usually twelve days.

Period

Sudden onset with feverishness; Symptoms headache, severe backache, and vomiting. About the third day there is a red rash of pimples that feel like shot under the finger. These appear first about the face and wrists. Later these form into blisters, and then become yellowish and filled with Scabs form and fall off pus. about the fourteenth day.

Prevention

- The sure prevention of smallpox is vaccination. It is even a preventive after the person has been exposed. As one may be exposed without knowing it, the safest plan is for every one to be vaccinated. The protection afforded by vaccination gradually diminishes. It would be difficult to say just when safety would demand a revaccination, but it certainly is always safe to revaccinate during an epidemic, and especially when one has been exposed, if he has not been recently vaccinated.
- Remarks Smallpox is unusually infectious, but it is not known exactly how the infection is carried.

#### Sore Throat

(Acute septic)

All ages.

Age

Age

- Mode of Mouth spray, discharges from nose Infection and mouth, and also through the milk supply.
- Symptoms Begins with sore throat and weakness. Throat becomes diffusedly red and may show patches like diphtheria.
- Remarks The condition may be followed by affection of the heart and kidneys.

#### Tuberculosis

- Any age. It is supposed by some that all infection takes place in childhood, and that the disease remains latent to gain ground later on in life, at some time of exhaustion or undue exposure.
- Mode of Largely through mouth spray and Infection discharges from nose and mouth. About 10 per cent of the children become tuberculous through milk.
- The disease begins very insidiously Symptoms with increasing languor, and disinclination to make effort; slight falling off of weight; perhaps slight hacking cough in the morning, and slight rise of temperature afternoons, perhaps subnormal mornings. As the disease advances, the cough and the temperature may increase, and there may be night sweats, but at first there may be very few symptoms to indicate the presence of the disease.

Most Prevalent

Age

Mode of Infection

Incubation Period

Symptoms

Most

Mode of

Age

The prevention includes on the Prevention part of the consumptives a scrupulous care of the discharge; an open-air life with abundance of nourishing food, including milk and eggs. For the benefit of those who live in the same family or in the same building. the ventilation should be perfect, and scrupulous attention should be given to cleanliness and to the avoidance of contamination of floors, bedding, clothing, etc., with the patient's discharges. Abundance of fresh air, cleanliness, moderate exercise, and nourishing food are great preventives of this disease.

#### Typhoid Fever

- Age
- All ages, especially from ten to forty years.
- Most In October, November, and Decem-Prevalent ber.
- Mode of Water, milk, oysters (and 'some-Infection times other food eaten raw), flies, excreta. Often transmitted by means of "carriers." Often comes on after a vacation trip to the country.
- Incubation About fourteen days. May be Period from five to twenty-three days.
- Symptoms There may be a few days of weakness, with indisposition to work, followed by fever, temperature increasing for about a week with morning remission, and then remaining stationary for about a week, then gradually dropping to normal. The temperature curve, however, is very variable. There is a rash on the abdomen at the end of the first week, consisting of small red spots which may

also extend to the chest. There may be diarrhea or constipation.

Prevention Prevention is usually by a public health measure, guarding the milk and water supplies, etc. Another very important measure of prevention is antityphoid inoculation. Each individual should do his part by assuring himself that the milk and water are above suspicion, or else he should not use them until they are boiled.

#### Whooping Cough

Children.

- Most
   January to June. Liable to follow

   Prevalent
   epidemic of measles.

   Mode of
   Mouth spray, and discharges from
- Mode of Mouth spray, and discharges from Infection nose and mouth.

Incubation Four to fourteen days. Period

- Symptoms Begins like a cold in the head with sore throat and cough, which is worse at night. The first indication that it is not an ordinary cold is the characteristic "whoop" which follows a period of prolonged coughing. This comes about two weeks after the beginning of the disease.
- Remarks The after-effects of whooping cough are often very severe. Relapses are liable to occur. Children are rarely subject to a second attack. The infectiousness is greatest during the first and second weeks. As the disease is often fatal, children having it should be strictly isolated from other children.



Vaccinated

Unvaccinated

Smallpox Has No Terrors for the Vaccinated

QUESTIONS AND ANSWERS

Answers this month by G. H. Heald, M. D.

This is a service for subscribers to LIFE AND HEALTH. For personal reply, inclose two-cent stamp, and address Editors LIFE AND HEALTH, Takoma Park, D. C. If you are not already a subscriber, send also the subscription price with your question. Replies not considered of general interest are not published; so if your query is not accompanied by return postage for a personal answer, it may receive no attention whatever. Remember that it is not the purpose of this service to attempt to treat serious diseases by mail. Those who are sick need the personal examination and attention of a physician. State your questions as briefly as possible, consistent with clearness, and on a sheet separate from all business matters. Otherwise they may be overlooked.

Laxatives

#### Fruit Paste

"One pound stoned dates, one pound each of stoned prunes and seedless rai-sins, ten cents' worth of senna leaves. Mix and put through a meat grinder. Pack in a tin cracker box lined with wax paper. This will keep several weeks. Eat a piece of paste, size of a caramel, and drink a glass of water each night before retiring. A healthful, appetizing, relaxing food; a safeguard for sedentary workers and the aged."

" The above recipe we clipped from a newspaper some years ago, and have made considerable use of it - except eating the fruit ' candy' at the close of a meal instead of just before retiring. Do you think senna in the proportion mentioned would be harmful to the system? Is senna tea injurious? If not, in what proportion should it be used? Do you recommend the Dr. T-'s method of taking enemas, two or three times daily in many cases?"

\* \* \* \* \* \* \* \* \* \* \* \* \*

One would not say that a crutch is harmful; in many cases it is absolutely necessary; but I should advise a person never to use one unless it is actually needed, and to dispense with its use as soon as possible. We realize that a person who can get along without a crutch is much better off than a person who has to use one. At best, a crutch is a necessary evil. All artificial methods of emptying the colon are comparable to a crutch. They may be necessary, but it is much better to get along without them if possible - that is, if regularity can be secured by the use of natural foods; but the use of some simple laxative is much better than a condition of habitual constipation. I do not know but senna is about as harmless as any of the laxatives.

We have never been convinced that there is any advantage in Dr. T---'s method of taking enemas.

#### Dandruff

"Please give a good remedy for dandruff. How may it be prevented?"

Dandruff is an infection caused by a microorganism working in the scalp. It is trans-ferred by combs, brushes, etc., from infected heads. One should have his own individual comb and brush, and never use those belonging to some one else. Especially should one avoid the use of public combs and brushes. When one attempts to rid himself of dandruff, he should either sterilize his comb and brush or get new ones.

The following has been recommended as " one of the best " remedies for dandruff:

Agua ammonia	 drams
Cologne	 dram
Alcohol	 ounces
Water	 ounces

Mix and apply about 11/2 ounces at a time to the hair, when dry, and rub briskly. This makes a fine lather, or foam. Repeat several times, and wash with good tar soap. Then thoroughly rinse with water, at first hot and then gradually cooled. This treatment may be repeated once or twice a week. After cleansing the head, do not invite more dandruff by using an infected comb and brush.

#### Arteriosclerosis

"What is the cause of arteriosclerosis, and how may it be prevented?"

Arteriosclerosis is a change that takes place in the blood vessels as one grows old. Those who live to be eighty, ninety, or more years old, usually have youthful blood vessels at a period when the blood vessels of other persons have hardened. Those in whom arterial changes begin early, age early and die early, as a rule. There are a number of causes of arteriosclerosis: Various poisons, as lead and alcohol; bacterial poisons; syphilis. But perhaps one of the important factors of this cause of early funerals is an excess of food with too little exercise; or as Dr. Edwin W. Janes puts it, " consuming the food of athletics and taking exercise by proxy." As to the prevention, there are

some important rules to be followed: First, be born right, then live right, avoiding all excesses; and practise "good living." Live simply and sanely, and this old world will not slough you off so soon. Some of the foods to be avoided, which are mentioned by Dr. Janes in connection with arteriosclerosis, are meats, hot cakes, fried foods, pastries, highly seasoned foods, tobacco, and alcohol.

#### Aphthæ - Ulcerated Sore Mouth

"What can I do for small blisters like cold sores that form on the edge of the tongue or inside the cheek, and turn into irritating sores? "

This is a condition known as aphthous stomatitis. The cause may be irritation, caused, perhaps, by a broken tooth or a rough toothbrush. Or it may possibly be disordered mouth secretions. Aphthæ yield best to a weak solution of silver nitrate, or better, a 20-per-cent solution of argyrol.

#### **Blood** Pressure

"What is the normal blood pressure as related to age? I have been told that it should be 100 plus the age."

Life insurance men once had such a rule, but it was found to be unsafe. A safer rule is to count 120 millimeters mercury for a person twenty years old, and then add one millimeter for each two years after twenty, so that a person fifty-six years old should have a pressure of 120 + 36/2, or 138. A range of seventeen degrees above or below is not deemed abnormal, so that a man aged fifty-six might still have a pressure of 155 and be considered within the normal. Perhaps one at the age of fifty-six who had a pressure of 140 would be a safer risk than one who had a pressure of 150 or over. But it is not safe to estimate pressure on one test. The pressure changes during the day, owing to various physiological changes. Some temporary condition, even the excitement of taking the pressure, might send it up a few degrees.

#### Cold Sores

#### "What is the best and quickest remedy for cold sores?"

solution of pieric acid is better. It is said to a for a dressing, and have it well wet with the be more rapid, and to be followed by fewer solution. extensions of the cold sores. Pieric acid so-lution is an excellent addition to the family ing this solution, suggests its use in wounds medicine chest. It is valuable in burns, even that fail to heal, in infections, boils, and ery-bad burns; and applied on gauze, makes a sipelas. It can also be used to irrigate in fine wet dressing for eczema. It should be re-membered that pieric acid is a first acousing to for 100° or more membered that pieric acid is a first cousin to of 110° or more.

some of the violent explosives, and it should not be used too carelessly around an open flame. It is not volatile - that is, the flame would have to come in contact with it in order to ignite it.

#### Drowsiness

"What can I do to overcome drowsiness while reading?"

Try a little osteopathy; knead vigorously the muscles at the back of the neck.

#### Raw Eggs

" Is it true that raw eggs are more digestible than cooked eggs? And if not, why are they given to invalids?"

Raw eggs are given to invalids on the supposition that they are more digestible than cooked eggs. This supposition has been shown by careful experiment to be entirely erroneous. Heating the egg to 158° F. increases its digestibility. Raw egg is digested with considerable difficulty. It fails to stimulate the flow of gastric juice and bile. It is hurried through the stomach, is acted on very poorly by the pancreatic juice, and may cause diarrhea. In fact, there is no point in which raw egg is superior to cooked egg. Even hard-boiled egg is assimilated more readily than raw egg.

#### Asthma

"I have suffered intensely with asthma, and have tried about all the remedies offered for this trouble, with no permanent relief. Can you suggest anything new?"

Nothing new. You might try a remedy recommended by Dr. Solomon Solis-Cohen. It is aspidiospermine hydrochlorid, gr. 1/10 to 1/2 every hour or two, then less frequently as relief is manifested. Like other remedies, this is only palliative, but it does tend to prevent the recurrence of spells at night, and relieves the constant distress.

#### Wright's Solution

#### "What is Wright's Solution, and for what is it used?"

Wright's Solution is a solution of sodium citrate, 1 part; common salt, 6 parts; distilled water, 200 parts. It should be boiled. When cold sores?" Peroxide of hydrogen, full strength, usually granulation, and hastens the separate works well, but perhaps a 1-per-cent watery small sloughs. Use a liberal quantity of gauze works well, but perhaps a 1-per-cent watery small sloughs. Use a liberal quantity of gauze used on wounds, it keeps them clean, favors

# NEWS NOTES

#### Typhoid After Camp-Meeting

Following a Negro camp-meeting held in North Carolina, there was an outbreak of typhoid fever as a result of drinking water from the local supply. There were more than fifty cases of severe typhoid with two deaths up to the time of the report.

#### Sergeant York an Abstainer

When Sergeant Alvin C. York, of Pall Mall, Tenn., the world's greatest soldier, performed the feat in the Argonne forest whereby he killed 28 Germans, captured 130 prisoners, and put out of commission 30 machine guns, he was not stimulated by liquor. That is his declaration. He said: "I have not taken a drop of any sort of liquor for five years."

#### Plague in This Country

Plague has shown itself in New Orleans, and in Oakland, Calif. In the latter city the first victim was a squirrel hunter, who evidently had become infected from a plague-infected ground squirrel. From this first case there was an outbreak of pneumonic plague. Though the last death in this outbreak occurred Sept. 11, 1919, it is well to remember that the germs of plague are active among the rodents — mostly ground squirrels — of the Pacific Coast, and as a result of increased virulence, we may some day witness an outbreak of plague in a malignant form.

#### Sunlight and Blood

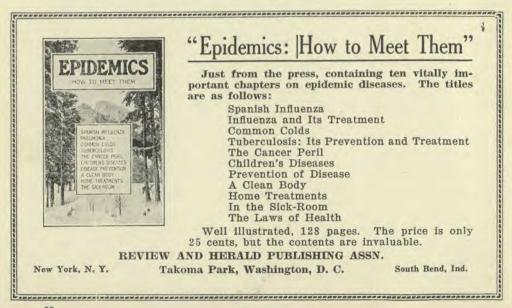
An examination of certain horses which had been for some years down in a mine, shut away from any sunlight, indicates that there is no noticeable change in their blood, from which it may be inferred that sunlight does not have such an influence as is popularly supposed in making red blood. This is borne out by the report of Nansen, who during the long arctic night, examined the blood of his men and found no resulting anemia.

#### Antirabic Treatment

Since 1900 more than 11,000 persons in the vicinity of Lyons, France, who have been bitten by rabid animals, received Pasteur treatment, and of the number only 10, or 0.08 per cent, failed to be protected. During 1918, 784 persons received antirabic treatment at the Lyons institution, and though more than half of them had been bitten by animals proved to have rabies, there were no deaths.

#### For Burns

The following is highly recommended: By means of a piece of absorbent cotton, swab over the burned space (whether it is a superficial or a deep burn) with tincture of iodine, making only one application. For a short time the pain will be severe, then it will cease completely. The iodine also acts as a valuable antiseptic.



#### Influenza and Tuberculosis

In a medical journal from Lima, Peru, Corretto states that of the fifty-two tuberculous inmates of one ward not one contracted influenza, although there were influenza patients in the ward. A similar report comes from a tuberculosis preventorium in Lima. This might indicate that tuberculosis confers a measure of immunity against influenza. On the other hand, there seems to be no reason to doubt that influenza increases the predisposition to tuberculosis.

#### Chilling and Colds

Recent Investigation goes to show that the old explanation of why chilling the surface causes a cold is no explanation at all. It has been asserted from time immemorial that chilling the surface causes congestion of the mucous membrane, and that this local congestion is what favors the germ attack which constitutes the cold. The iconoclasts have demonstrated to their satisfaction by the use of delicate thermo instruments, that when the surface of the body is chilled, the mucous membranes (nose, mouth, throat, etc.) are actually cooler.

#### **Charges Against Turkish Physicians**

Charges that Turkish physicians not only plotted against the lives of the Armenian people, but also directed a special campaign against their Armenian colleagues, are substantiated by testimony of prominent Turkish physicians. Some of the criminals have fled from the country, and others are awaiting trial. So says "Persecution Directed Against Armenian Doctors in Turkey During the World War," a pamphlet published by the union of Armenian physicians in Constantinople.

#### The Germ of Yellow Fever

It is now claimed that the specific germ causing yellow fever has been identified. It has been given the name of *Leptospira iceroides*. It is one of those very minute germs capable of passing through a filter that will hold the ordinary bacteria. There is reason to believe that only a few of the stegomyia mosquitoes that puncture a yellow-fever patient become infected. It is only an occasional mosquito that happens to include *Leptospira* in its meal of blood, and it is these few that transmit the disease to other humans.

#### Olive Oil as a Laxative

The Journal A. M. A. calls attention to the value of olive oil and other oils, as cottonseed oil, as laxatives, which "can do all that liquid petrolatum [mineral oil] can do and one thing more; they can nourish the body." Oils to act as laxatives must be used in greater quantity than can be digested and absorbed. A person who tends to overweight should not use the oils, as they will put on more fat, but should use mineral oil. A thin person, on the other hand, will do well to use one of the food oils as a laxative. Diabetics, however, should not use the oils in this way, owing to the tendency to acidosis.

#### T. B. Hospitals Not Wanted

One of the strangest freaks of mind is the persistence with which communities resist all effort to locate a tuberculosis hospital in the neighborhood. Notwithstanding the demonstrations that such institutions do not endanger the health of the native population, there is a persistent fear that such an institution in a locality means poorer neighborhood health. People who may have careless consumptives in their own homes, a menace to themselves, and who make no effort to better matters, are sometimes the loudest in their protest against having a tuberculosis sanatorium in the neighborhood.

#### Chicken-Pox and Shingles

There seems to be a relationship between chicken-pox and herpes zoster (shingles), a condition characterized by a local neuritis and a row of blisters around one side, between two ribs. It has been thought that herpes zoster is caused by the germ of chicken-pox. Sometimes one member of a family will have herpes zoster, and the other members will follow with chicken-pox, or the herpes zoster may follow the chicken-pox. While there have been enough of such instances to obviate any suspicion of coincidence, still it cannot yet be stated as a scientific demonstration that the two conditions are caused by one germ.

#### The Home Study Habit

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# BOOK REVIEWS

#### The High Road to Health

by Dr. James E. Kelley. Cloth, 254 pages. Illustrated. Dodd, Mead & Co., New York.

From time immemorial men have essayed to write books on personal hygiene; and the "only sure way to health," if we are to believe all these authors, is a very diverse way. Some emphasize one feature, as exercise; others emphasize diet. What some consider essential, others deem of no importance. It is a case where the "doctors disagree."

Dr. Kelley has the advantage of some fiftyfive years of successful medical practice, and moreover he has had the experience of restoring his own health by methods developed by himself, which after using successfully on numerous patients, he gives to the public in this book.

He counts six essentials to health building: First, perseverance, then air, water, exercise, diet, and sleep. It is quite evident that he has not drawn his ammunition from other men's writings. For instance, he does not advocate a daily bath — or any bath for that matter as a health necessity, "to keep the pores open." He thinks, and probably rightly, that bathing, — except for the tonic effect — is a measure for self-respect and the comfort of your friends rather than for health.

He is a firm believer, however, in a liberal use of water internally, at least two or three quarts daily; and he has no use for tea, coffee, coccoa, or any of the stimulants or narcotics. He does not agree with the modern notion that water drinking is harmless at meals.

He attaches great importance to exercise,

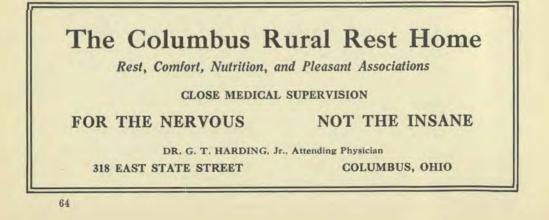
giving careful directions for bed exercises, floor exercises, dry-swimming exercise.

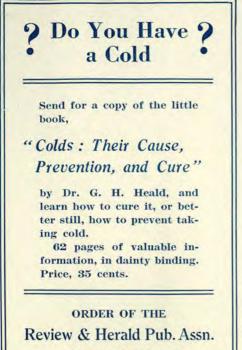
In diet, he is convinced that the vast majority of people eat too much. He gets down to practically a lacto-vegetarian diet, though he eats four ounces of fish or meat daily. His bill of fare gives him two ounces of protein (60 grams) and a fuel value of 2,500 calories. Among the things he rejects are stimulants, tea, coffee, cocoa, chocolate, animal soup, eggs, veal, pork, liver, kidneys, sweetbread, sugar, and salt: meat and milk at same meal. But he also rejects oatmeal, breakfast cereals, buttered toast, berries, nuts, peas, beans, lentils, potatoes, tomatoes, asparagus, and rhubarb. Some of us would disagree regarding some of the articles in his rejected list.

One thing seems to indicate a misconception. He says, "I do not coincide with the popular condemnation of vegetable acids, of which malic acid and others are in abundance in rhubarb." But he is suspicious of the *apple*, which, as he says, "contains a large quantity of malic acid." But does he not realize that the characteristic acid of rhubarb is oxalic acid, which is sometimes present in sufficient quantity to cause acute poisoning? Oxalic acid is poisonous, malic acid is not. Why reject malic acid in the apple and accept it in rhubarb?

There are chapters on "Appearance," "Toilet," "Habit," "Social and Personal Poisons," "Constipation," "Obesity," "Self-Massage," and "Training."

Altogether it is an excellent addition to the numerous health manuals, giving a number of new viewpoints.





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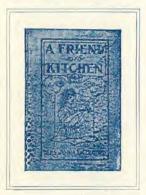
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# 'A Friend in the Kitchen"

Commenter & Commenter

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great essentials in these days of the High Cost of Living. The recipes are simple, practical, and satisfying, and the book is popular on this account.

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