# Jife & Health

WASHINGTON D.C.

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"\_\_\_\_\_that thou mayest prosper and be in health, even as thy soul prospereth." JOHN 3:1-2.

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A FARMYARD SCENE

In view of the wonderful value of the farm as an educator, it seems a pity that all children cannot have at least part of their childhood on the farm.



### HOW TO LIVE

L. A. Hansen

EDITORS

G. H. Heald, M. D.

VOL. 34

AUGUST, 1919

No. 8

### EDITORIAL

### -Sow Health-Reap Health

THERE is a mighty truth, far-reaching and comprehensive, in the Bible statement concerning man's sowing and reaping: Read it again. "Be not deceived; God is not mocked: for whatsoever a man soweth, that shall he also reap. For he that soweth to his flesh shall of the flesh reap corruption; but he that soweth to the Spirit shall of the Spirit reap life everlasting." Gal. 6:7, 8.

Whether we apply this truth to seed sowing, of grain or vegetable, or to character sowing, we know that like produces like. Corn produces corn and oats come from oats. Habits of industry and virtue bring returns in kind, and fast living and sowing of "wild oats" yield their own crops.

So, too, in the physical life, may we count on reaping exactly what we sow. We may know that health and disease are two things, entirely different one from the other and each coming from its own seed. What the harvest shall be depends on what and how we sow, and when we sow one thing we will not reap another.

Make application of this truth today as you think of tomorrow. If you want tomorrow to be a good day, plan for it today. Remember that next year will roll around and will then be now. Bear in mind that ten years from now you will want health. Look ahead still farther and don't forget that now, today, and tomorrow, next week, next year, and year after year you are sowing the seeds of health or of disease for a future crop that will surely come.

### A Divine Law and a Good One

It is a divine arrangement that what a man sows he shall reap; so we may with the fullest confidence look forward to the harvest of health when we know that we are sowing the seeds of health. There is no such thing as a crop failure in the matter.

If we have rheumatic pains, kidney trouble, sleeplessness, indigestion, or some other physical ailment, we may know of a certainty that so newhere, sometime, we sowed the seed of what we are now reaping. Not because an arbitrary, cruel, vindictive, and vengeful God is dealing us punishment, but because in the wise and good providence of the Creator it was planned that laws should govern our beings, and that according to law every physical transgression would bring its fixed physical penalty.

Banish every idea that sickness, pain, and disease come as punishment, inflieted like so many stripes, for acts of disobedience. Consider rather that as a natural course violation of health laws must bring, sooner or later, a proportionate result. If the seed is planted, it will grow. We may have such a store of health that a slight dissipation may not be noticed; our constitution may be strong enough to withstand more or less abuse without apparent effect, but it is a fixed law that what a man sows will grow. The seed comes true; and if it is put in growing soil, it will yield. The man who says he can digest nails and that nothing hurts him is simply mistaken.

Get it again,— it is a divine arrangement, or a part of God's law, that sowing for health brings health, and sowing for disease brings disease. In other words, when we violate the laws of health we violate laws that God has established. These laws are immutable, not subject to man's change or abolishment or amendment. They are fixed.  $(A \cap A)$ 

When we speak of fixed laws of health we do not mean something narrow or restricted, based on individual conception, or on the experience of a man or even of a class of men. Physiological laws take into account many conditions under which various races and various types of individuals must live. Nature is kind, though not indulgent, and provides for an adjustment and an adaptation of the human system to various conditions of living that may seem abnormal. But this does not discount the stability of her laws.

But get this,— the law of cause and effect was not ordained for the purpose of bringing disease and distress on man, but to give him health and enjoyment. It would be better to give more thought to the good that would result from obedience than to be so much concerned about what comes by our disobedience. We can just as well sow for enjoyment and get it as to do the other thing. Conforming to the laws of health will insure health, and when we have that we cannot and will not have disease.

### Physical and Spiritual Relationship

The law of sowing and reaping does not stop with the physical being. The body does not live to itself. There is not a definite border line that separates the physical life of a man from his spiritual. It isn't even a matter of gradual shading from one to the other, but one of the closest relationships. The things that conflict with the natural laws that govern the health of the body militate also against the welfare of the soul.

Digressions in eating, loss of sleep, overwork, and other violations of health laws may result in indigestion, headache, nervousness, and other ailments, but the effect does not always stop with these. Impatience, fretfulness, chafing, worry, hasty and unwise decisions, and various errors of behavior often result. Serious faults and even gross sins may be closely identified with gross violations of natural law.

### EDITORIAL

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We will not say that all moral sin lies in transgressing physical laws, or that all deviations from physical law mean moral sin or indicate moral depravity. But it is safe to say that sin and disease have the relationship of cause and effect. A knowing disregard of health laws, with a knowledge that such laws are Godgiven, is a moral wrong. In this sense are we sinners and need to repent and reform, when we willingly violate the laws of health. L. A. H.

### Get on Speaking Terms with Nature

In this bustling, hustling, hurrying age of trolley cars, motor cars, and airplanes the greatest urge in life seems to be to cover space, to get somewhere else.

It is a spirit of unrest, a dissatisfaction with the present, a craving to be released from self and present surroundings.

The same spirit is manifest in some who cannot afford the luxury of travel, in that they cannot endure to do any piece of work perfectly. Whatever work they may be doing, there is something within the a that urges them to rush it through and take up something else — anything for a change. Whatever the present occupation may be, it is one to be slighted by cutting the corners and jumping the fences.

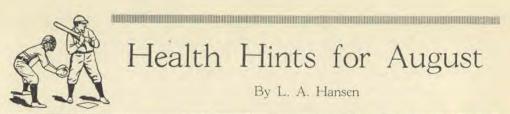
Reading a book thus becomes wearisome. Whatever it may be (unless it is fiction, and even then sometimes), it soon becomes a bore, and the reader hastens through, skipping parts, in order that he may take up some other book or magazine. The cow always sees better grass in the next pasture.

The conversation in milady's parlor, merely a device for escaping from the boredom of self, usually consists of the froth of life, and rarely taps the deeper springs of the soul. Alcohol, tobacco, and narcotic drugs are popular for the reason that they enable the users to get away from themselves.

So then, in our travel, in our work, in our reading, in our conversation, in our drugging, we — or many of us — are striving to escape from ourselves. The worst that can happen to us is to be left alone with ourselves, with no diversion by which we may escape from ourselves. There is an escape, however, or rather there is a means by which we may get on better terms with ourselves.

Nature calls to us, "Commune with me." Now that does not mean a trip to the Grand Cañon, or to Yellowstone Park, or the Bernese Alps, or down the Amazon River. Nature is not confined to a few show spots beyond the reach of our purse strings. We can find nature in our back yard or front yard. A flower, a leaf, a squirrel, a bird singing on the fence, a miniature Grand Cañon gullied by last night's rain, a cricket, the sun, the clouds, the stars — nature calls us in myriad forms, a call many of us have never heeded, because we wanted to see nature somewhere else. We imagine that nature is to be found only at the end of a thousand-mile railway or automobile trip.

Agassiz was a great naturalist because every rock, every blade of grass, every bird,—no matter where he was,—had some message to him from nature. We may not be privileged to see in nature all that Agassiz saw, but by beholding we may become changed. We need more of this communion with nature, taking time to see the great beauties of the little things all about us. And we need most of all, to let our minds commune with Him who is the Architect and Builder and Upholder of all these things. 6. H. H.



THERE are certain diseases that seem seasonal, that is, they are more prevalent at certain seasons of the year than at others. We see a maximum of pneumonia, diphtheria, and bronchitis in winter; scarlet fever and measles in the spring, bowel troubles in the summer, and typhoid fever in the fall. Some diseases are classed as "hot-weather diseases" and others as "cold-weather diseases."

The relation of season to disease is an interesting problem in the general question of health. Considerable study has been given to the problem, and it is the opinion of some medical men that the determining factor in seasonal diseases is not altogether in the particular time of the year, but that our manner of living at that time has as much if not more to do with the causation of disease.

The indoor living of winter time, with staying much in stuffy rooms of high temperature and poor ventilation, subjects us to diseases of the respiratory organs; and as a result winter sees a prevalence of colds, pneumonia, grip, and similar diseases. Tuberculosis gets a good start at this time. Influenza and other crowd diseases tend to become epidemic because of the huddling together of so many people indoors.

In summer we get out of doors as much as possible, and a great decline is seen in diseases of the respiratory organs. Pneumonia scarcely ever occurs in summer. Consumptives improve as they are able to get outdoors with the coming of spring. The observance of health habits suited to weather conditions would give a large exemption to these diseases, regardless of season.

In summer we are susceptible to another class of diseases, as typhoid fever and diarrhea. The typhoid germ can live in winter, for even though it should be frozen, it becomes active when thawed out. But the winter season is not favorable to the spread of typhoid. There is more typhoid fever in August than in the three coldest months of the year together.

Our winter habits do not expose us to the disease as do our summer habits. The hot weather favors the increase and spread of disease germs. Temperature conditions are favorable for the propagation of germs; flies carry them wherever they can gain access, and the summer habits of people help to develop and spread them.

That hot weather has a marked effect in reducing physical vitality and increasing the susceptibility to disease, is without question. Exactly how this is done is a question. Various theories are advanced. It is agreed that the hot season demands special attention to a physical preparation to meet its enervating effects. We should anticipate the hot season which we know will come, and not let it catch us unprepared. It is best to build up the body health beforehand. A store of good health is the best thing for carrying one through August and September.

By all means guard the digestion. Eat light meals of food that will not overload the system, either in the work of digestion or in the quantity of food. Fruits, green stuffs, and fresh vegetables are especially good, affording food elements not too heating and providing the bulk so necessary to clean the bowels,—a matter always important and especially so at this season.

Be careful not to use food partly spoled. Remember that foods spoil readily in hot weather, and that the process of digestion is not one of disinfection. When foods are eaten that have already begun to spoil, they will continue to spoil after being eaten. The disturbance this may occasion to the entire system and the health may be very serious. This is a productive cause of summer bowel trouble.

All care should be taken to guard against diarrhea and dysentery. Unusual looseness of the bowels may be a serious symptom, and should have immediate and careful attention. Constipation also should be avoided. Free perspiration may draw on the fluids of the body so that the contents of the lower howel become dry, with stagnation and constipation resulting. The retention of the body wastes means overloading the system with poisons, the care of which taxes the various eliminative organs and endangers the health of the entire system.

The free drinking of water is a help toward preventing constipation. It should be taken between meals and should not be too cold. Thirst is a demand for water, not of the mouth alone, but of the whole body. Drink with a view to supplying this demand, and not merely to satisfy the palate. It is the water content of any drink that quenches thirst, and not the flavoring matter.

Get sufficient sleep. The long evenings of summer and the pleasant early morning hours make long days, but do not let this beguile you into shortening your period of sleep — one of the essentials to a good digestion and the building up of vital endurance and resistance.



# The Why and How of a Vacation

G. H. Heald, M. D.

R USSELL SAGE is credited with saying that vacations are unnecessary: that he never took one. Probably the latter part of the statement is true; for he was so intensely interested in the Wall Street game that it was a constant fascination to him, and a vacation would doubtless have been a bore. But was the statement true as regards the average, person? Can one get along as well and do as good work without a vacation? And if one cannot, why not? Is a vacation necessary; and if so, why?

If we may judge from the popularity of vacation trips, and from the money spent on them by all who can afford it, vacations must be considered beneficial, and even necessary; and the

general testimony is that one comes back from such a trip freshened for his work. More than that: not only does a well-spent vacation prepare one for better work, but it retards vis aging. If, during the eleven months of steady grind, he has aged, say, eighteen months, he comes back from his trip looking months younger than when he started.

What is the magic spell by which the vacation is enabled to turn back the wheels of time, reverse the

process of nature, and cause aging cells to rejuvenate? Does the change of scene and of occupation enable the brain to dimb out of its old rut? Partly so. The benefit of the great national and other conventions is the opportunity they give to many to view new landscapes, to see new faces, to hear new voices, get a new view of life, and perhaps to hear new solutions of some of their perplexing problems. Probably the convention sessions make the least permanent impression on the minds and bodies of the participants.

But why an expensive vacation to get a change of scene, a new view of life? Most people do or could get such a change every day in some form of recreation; and in order to keep themselves in the very best condition, they ought to do so. But granted that one gets an ample amount of recreation daily, the annual vacation is still a great benefit. Is it

because the vacation gives a greater change in scene than the daily recreation? That may be so, but the vacation may be made to yield a still greater value; for if we may believe Dr. Huntington, the greatest benefit of a vacation  $\chi_{\phi}$  is the change of air or climate.<sup>1</sup>

Dr. Huntington has shown that for every place which he has investigated there is a seasonal change in the mortality rate. For instance, in Massachusetts the mortality is highest in March, lowest in May and June, higher in July, lower in September, and higher again in December and January. He has also shown that the general health is better during those periods when the weather is more variable. This seems a startling statement, but carefully prepared statistics seem to indicate this to be a fact.

Not only do slight changes in the weather improve the health, but there is sometimes great benefit from a complete change. Instinctively those who live in the mountains desire a trip to the seashore, and those at the seashore look forward to a trip to the mountains. Such changes benefit not only because of the novelty, but because of the tonic effect of a changed atmosphere.

Many people from the United States who can afford to do so take vacation or health one who can do so to take the tonic of an occasional trip to some contrasting climate. It will make for better work and probably for longer life.

For one who has lived inland, nothing is better than a sea trip, especially if he has been living a driving, overactive life. The enforced rest for the first day may be irksome, but soon one falls in with the care-free, happy-go-lucky spirit, and then it becomes a luxury just to relax and let the time slip by as the boat glides through the water. A trip through the Great Lakes would answer the same purpose.

To those who live conveniently near some great natural wonder, as Niagara Falls, Yellowstone Park, the Grand Cañon, Yosèmite Valley, and any one of the many others that might be



Courtesy Florida East Coast Railway

Automobiling on Ormond Beach, Florida

trips to the Bermudas. These islands, with their almost constant temperature, are regarded as a natural sanitarium, a kind of paradise on earth; and yet the people of Bermuda rapidly deteriorate, and if they do not occasionally take a trip to some more rigorous elimate, they finally vegetate and stagnate, and become incapacitated for doing efficient work.

The same is true in all mild climates. The tendency, unless the inhabitants take an occasional trip to a contrasting climate, is for them to become more indolent and listless. The mildclimate lacks tonic, and is a paralyzant of natural energy. The great evil of the tropics is not the intense heat, for in some places the heat does not go so high as in many parts of the United States, but in the monotony of the warm weather. Even in those localities which are not blessed with the reputation of being health resorts and "winter resorts," like Florida and Southern California, it behoves every named, the inspiration of the trip is well worth the time and the means expended. Of course there are many who in the matter of vacations are very much limited in their choice, which often resolves itself into a trip to some near-by country boarding place. And there are usually good summer resorts, but there are many that are not so good. Not every place that puts an attractive advertisement in the paper is reliable. There are many pitfalls and dangers; and it would be better for one to remain at home than to go to some of these places.

Among the disagreeable and dangerous items in country boarding are mosquitoes and flies. If the place chosen is infested with these, one would better take the next train for home. Among the things not so noticeable, but perhaps even more dangerous, are polluted water and contaminated milk. One can, of course, insure himself against these dangers by boiling all drinking water and milk.

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It should not be thought that because the natives are apparently healthy, the water and milk are necessarily wholesome. The natives may all be typhoid carriers and typhoid immunes, free from the disease itself, because they have had it, but harboring the germs, and transmitting them through the privy and the shallow well to



the shallow well to the drinking water and the milking utensils. Nearly every year, after vacation time, there is an increase of typhoid fever in our cities among those recently returned from the country. The country, in fact, is the home of typhoid fever and malaria. By avoiding mosquito-infested neighborhoods, bad water, and polluted milk, one will greatly lessen the danger of an after-vacation funeral.

The automobile has become a most popular method of taking a vacation. It has many advantages. For instance, the traveler is not bound by his ticket limitations. If he desires to change his route, he may do so at any time, or he may stay as long as he likes in one place. He may see much that is inaccessible by the railway. Particularly if one has a well-selected camping equipment such a trip is fascinating as well as health-giving. But it is necessary always that one be cautious as to the water supply and the milk. If there is the least cause for

suspicion, one should always boil them. There is a more humble method of taking a vacation — by means of a bicycle trip, and it is not to be despised. Such a trip can yield for a minimum of outlay a maximum of pleasure and health; and shall we omit nature's own method — walking — when men have walked across the continent? Slower, to be sure, than 'any of the other methods, but inexpensive, and for the student of nature one of the best, if not the best. For in many parts of the country one does not have to walk far to come in touch with some of nature's most marvelous works.

<sup>1,0</sup> World Power and Evolution," by Ellsworth Huntington, Ph. D., Yale University Press, New Haven, Conn.



Picture shows a well which is probably contaminated from the privy and the barnyard; moreover, the flies are permitted to carry filth from the excreta to the kitchen. THE body during life constantly generates heat, which is given off very largely through the skin. During exercise more heat is generated than during rest. We sometimes exercise to keep warm.

In winter the body gives off heat much like a stove, by conduction and radiation; but during warm weather the heat is very largely given

off by evaporation. The principle of evaporation is very simple and is generally understood. If we want a vessel of hot water to cool quickly, we take the lid off. This permits increased evaporation and hastens the cooling. If both hands are exposed to the breeze and one hand is wet, the wet hand will be cooled more rapidly, on account of the evaporation.

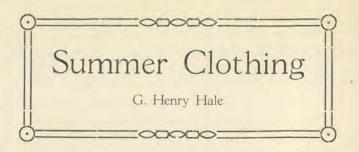
During warm weather our bodies give off more perspiration, and if this evaporates (as when the lid is taken from the vessel of water) the body is effectually cooled.

Evaporation is most rapid in hot, dry weather. It is not so rapid when the air is humid, or moist. That is why we feel clammy and uncomfortable on muggy days. The warmth increases the perspiration, but the humidity retards its evaporation. The perspiration therefore cannot evaporate as fast as it is poured out on the skin.

Clothing also retards perspiration. It acts somewhat like the lid on the dish of water. The heavier the clothing, or the more layers, the more the perspiration is retarded.

For summer weather, clothing should be selected which will best favor evaporation. In other words, the summer clothing should consist of few layers of light weight.

The custom of wearing shirt waists is an excellent one for men as well as for women, and doubtless it would have become popular but for one fact—it cut into the business of the tailors. And these autocrats of men's fashions



decreed that the male shirt waist should be taboo, and brave is the man who dares to wear one, almost brave enough to wear a straw hat down the street before the first of May! Man, the "lord of creation," who sneers at woman's slavery to fashion, is himself more a slave than she.

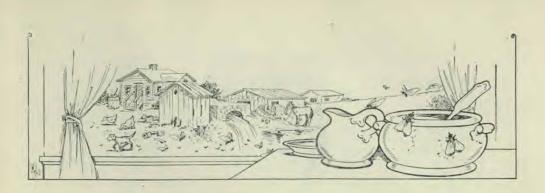
But if the shirt waist is taboo, the next best combination for summer outer garments is the two-piece lightweight suit, preferably of a light color. White, because it absorbs less of the sun's rays, is ideal, but means heavy laundry bills. Black is the poorest color for summer clothing. For underwear, gauze union suits of the abbreviated type are the best.

The shoes should be made to fit the feet, and should above all be comfortable for walking or sitting. Summer shoes should be of the lightest material, kid or cloth, preferably low cut, and the stockings should be thin.

For stiff cuffs, sensible men who have any regard for comfort, will have little use, especially in summer. One may be comfortable with a stiff collar, provided he does not mind the embarrassment of having it melt down on him. But soft collars are more comfortable.

When the heat from the sun is intense, hats should have broad brims to protect the face and neek. It is important that the hat be selfventilating. Unless there is adequate circulation of air within the hat, the condition of the scalp will be such as to favor germ growth, and hence dandruff and baldness. The straws are, of course, cooler that the felts.





# Leaf Taken from a Fly's Diary

5 A. M .- Have just come out from a sort of trance during which much must have happened. I have no memory of my past. Perhaps it is best so. I'm told that I was once one of these white crawling creatures called maggots, of which thousands are all about me. I refuse to believe it. I feel strangely weak.

5:10 A. M .- Stronger now, and my legs feel more as if they really belonged to me. Have queer, gauzy things on my shoulders; they seem to be of no use. It is very dark, close, and warm here. I believe that the place is called a manure pit, and am told that I was born here. Keep thinking of these maggot creatures. Strange how bothersome one's origin may be.

### FEARS MAGGOT LEGEND IS TRUE

5:20 A. M .- Have crawled all over the pit and explored every part. Made some acquaintances among young flies like myself. Also have a speaking acquaintance with a few old flies who have come here to lay eggs. Fear that



I believe that the place that I was born there.

maggot legend is true. I blush for my youth. The top of this place is being opened. I wonder what it means,

5:45 A. M.- Out in the world at last! The pit and the maggots are but a memory. The queer things on my shoulders are wings, and lifted me out of the pit. Am now resting on a stable window. Feel light-headed and hunis called manure pit and gry. Life is very interesting - if one can

forget one's origin. 6 A. M .- The most entrancing odors come apparently from a can outside the back door of a provision shop just across the alley from my stable. I must investigate.

HOW GERMS ARE SPREAD

### BIG TIME IN GARBAGE CAN

6: 30 A. M .- I was right about the can. Have spent the last half hour there in company with a thousand or more of my own kind simply gorging - fish offal, delicious bits of rotting meat, and decayed fruit and vegetables! We fairly wallowed in it. What a misfortune if some one should forget and put

the cover on the can!

7:15 A. M .- Am inside the provision shop. No end of fun! Already know the juciest, tenderest cuts of meat. Have sampled cheese,

cookies, cakes, and berries. Always walk over and examine a thing thoroughly before eating it; it pays.

8 A. M .- Have the wanderlust. Must see more of the world. Nothing else would tempt me to leave the provision shop. Only drawback is persistent annoyance by huge two-legged creatures slapping at us. Harmless, but very bothersome indeed.



Wiped some off on bread and butter and washed some off in a cup of milk for the baby in the third house down.

8: 30 A. M .- From sheer euriosity stopped in a barroom. Rather disgusting. Explored a cuspidor and then sampled the free lunch. Prefet the can back of the provision shop.

### CLIMBS UP PATIENT'S NOSE

8:45 A. M. Such a narrow escape! Slipped into an interesting-looking room where one of those two-legged creatures lay in bed and others stood around. Explored everything in the room and crawled over the nose and mouth of the creature in bed, which seemed helpless. Then one of the others got after me, and I just escaped with my life. As I was leaving heard

them say something about typhoid.

8:50 A. M.- Queerest tickling on my legs and feet! Wonder if it can have anything to do with that typhoid.

8: 51 A. M .- Discovered a thousand tiny creatures clinging to the hair of my legs and feet. Have swallowed a lot of them whole, but can't seem to get rid of the rest. Understand they're called germs. Must have something to do with that typhoid.

WASHES FEET IN PAN OF MILK

9:30 A. M .- At last I am rid

of most of those annoying germ creatures. Washed them off in a pan of milk. I saw a young woman drink the milk after I had taken a bath in it.

10 A. M .- On my way again. Visited another sickroom, but did not have time to half explore it. Boy sick with dysentery. By the feeling I believe I've got a lot more of those germ things on my legs. Must hunt up some milk at once.

10:15 A. M .- Got rid of most of the germs in baby's cup of milk. Babies are foolish, helpless things. It's great fun to torment them.

11 A. M .- An uncovered garbage pail just as I was growing hungry. So long as uncovered garbage exists the future of my race is assured.

8

Manure piles

Cesspools

Filthy stables

Dead carcasses

privy

Kill flies and mosquitoes

Destroy their breeding places

Cover up your food

Starve the fly!

Cartones his courtery of Lenest Hamin Baker

• Offal

-

Typhoid Fly

i i

11: 15 A. M .- Sun's hot. Believe I'll take to cover. Nice-looking house with hole in screen. Think I'll try it.

12:03 P. M.- Lunch is on the table; think I'll sit down with the family. Not equal to the garbage can, but does very well.

BROTHER DROWNED

### IN SOUP

12:06 P. M.- Just witnessed a terrible accident. A brother fly was drowned in a plate of soup. Wonder if the germ things washed off the fly's legs will annoy the man who has just swallowed the soup.

1 P. M .- Discovery of importance. Paper covered with what looks like molasses is a



annoying germ creatures - washed them off in a pan of milk.

FLIES AND MOSQUIT

Are your dangerous enemies

They breed in filth. They carry disease and death

\* FROM

1

pirth-place

Your food

Your drink

Your stomach \*

Your lips

YOU MUST

¥

Remember their names and what they stand for!

1

1

trap for flies. Now I'm wise: they can't stick me. Somewhat tired.

2 P. M .- Never touched me! Man trying to sleep objects to having me walk on his bald head. Missed again! This would be exciting if there were more danger.

2:30 p. m .- Man has covered his head with netting. Hope he smothers. A consumptive in the next room. Think I'll see what's doing.

3 P. M .- Nothing of interest here but the cuspidor. Have explored that thoroughly. Phew!

More of those germ things. I'm a mess! I'll hunt a place to wash them off.

3:30 P. M .- Rid of most of them at last. Wiped some off on bread and butter the woman next door was preparing for the children, and washed off some in a cup of milk for the baby in the third house down. Nice baby. Hope it likes the germs.

4 P. M .- Room darkened. Everything quiet. Guess I'll rest a bit.

5 P. M .- Signs of preparations for dinner. Think I'll visit the kitchen and help.

5: 45 P. M .- Walked over and sampled every particle of food in sight. Does very well, but I'll certainly look up a garbage can the first thing tomorrow morning. Got rid of the last of those germs in the butter. Feeling sleepy.

Malarian

One

Stagnant water

Dirty troughs

Privies #

The unseen fider

Clean stables

Clean privies

Every home and school should be screened

Shut out the fly

Spitoons

Slops

Think I'll retire to the ceiling for the night.

7 P. M.- This has been a most satisfactory day. After all, life is what you make it, no matter what your origin. From the manure pit to the pick of the best the land affords is going some. In fact, I begin to take some pride in my humbleness of birth. Glad I'm rid of those annoying germs. There's a pitcher of milk some one has forgotten to put in the refrigerator. Guess I'll get a nightcap from that and then sleep in preparation for a busy day to. morrow .- Washington Star.

Consulties on Health Publicies National Optimed of Education

# Elimination by

# Kidneys, Skin, and Lungs

M. M. Martinson, M. D.

THE question as to how much water a person should drink in twenty-four hours is a very interesting one. A man can fast for many days, but he cannot go without water. His health depends very much on the amount of water he drinks. The younger the person, the more water he needs.

Let us not forget the fact that the activity of every organ and the function of every gland in the body depends on water; every cell absorbs its food from the surrounding water. The plasma, or liquid part of the blood, is an internal fluid in which the blood cells live very forty ounces, or two and one-half pints of urine, in twenty-four hours.

Next we must consider the elimination of water and poisons by the skin. We understand from the study of physiology that the skin is full of little sweat glands. Each one is a small sewer which eliminates poisonous moisture from the body. Even when there is no perceptible sweat, this elimination is going on, as is easily demonstrated if we cover a limb with rubber. Let us make a low estimate of the imperceptible sweat, at one to two glasses of poisonous water eliminated by the skin in

"How prone we are, in preparing for our journey upward, to crowd our baggage with more or less of the trash of life, every pound of which means prolonged expenditure of effort! Of how little use is the trashy novel! We throw it away when read, and have nothing in its place. How much better a few good books which we can read and read again, and which have for all of the party a message which inspires."—" The Soul in Suffering," Robert S. Carroll, M. D., p. 86.

much as fish live in the sea. Every organ and every gland must have its food supply pumped to it in a liquid form, and the poisons are removed in liquid form, or by a process of water exchange. In other words, assimilation and excretion cannot go on without water; and the poisons with which the system becomes loaded must be diluted before they can be carried away by the excretory organs.

The principal organs engaged in this work of elimination are the kidneys, the skin, and the lungs, but the kidneys are the most active in the removal of poisons from the body. In health and under normal conditions these organs should remove one ounce of urine for every three pounds of the person's weight. The reader can thus figure out the work his own kidneys should do. The body weight divided by three equals the number of ounces of urine that should be exercted in twenty-four hours (16 ounces equal a pint, and 8 ounces equal one glass); so that a person weighing 120 pounds, in good health and with normal kidneys, should drink water enough for his kidneys to excrete twenty-four hours. When we sweat sensibly, this is multiplied many times.

Next we will consider the elimination of water and poison by the lungs. That moisture is thrown off from the lungs is easily demonstrated by breathing against a cold glass. But the amount excreted is not so easily estimated, for much depends on the amount of moisture in the air. We all know that on rainy days very little water is required, and on a dry, windy day large amounts are taken; so we will make a low estimate at one to two glasses of poisonous water eliminated by the lungs in twenty-four hours.

The above figures are for the elimination of water and poisons by the skin, kidneys, and lungs of grown persons. For children these figures must be doubled, and for those under one year of age, multiplied by four.

Now to sum up: We have learned that a person who weighs 120 pounds should drink enough liquid for his kidneys to eliminate five glasses of fluid; the skin, one and one-half glasses; and the lungs, one and one-half glasses. So a person who weighs 120 pounds needs from seven to eight glasses of water or liquids in twenty-four hours in order to keep his body eliminating the poisons as they accumulate. A part of this water is made from the food, for all fuel food is transformed into carbon dioxide and water. When elimination is not active, the power to fight disease is lessened; we feel dull and stupid; we are restless and may wake up at night with a nervous heart, or may have headache or backache. The digestive system is out of order. Some get the idea that they are bilious; others may notice constipation. Both biliousness and constipation are due to a shortage of water in the system. The organs cannot properly work if there is a lack of water.

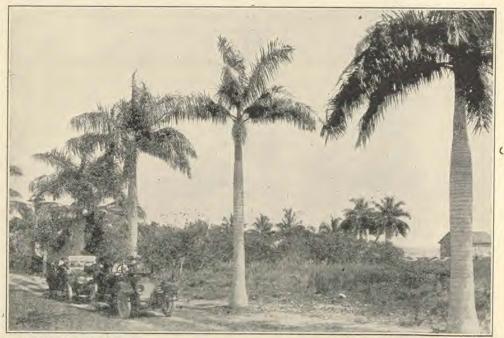
When you notice one or more of the foregoing symptoms, it is time to begin checking up your elimination. Watch your kidneys, double your water drinking, use a light diet with plenty of fruit for a few days. You may also try this remedy: Take a teaspoonful of Epsom salts and one-fourth teaspoonful of soda in a glass of water one hour before breakfast, and in ten minutes drink another glass or two of water. Try it for several mornings, and you will see a wonderful change in your feelings, as the salts will remove the acid condition in your system, even if it does not move the bowels. Epsom salts is looked upon as a digestive eliminator; it is more than that, as it helps the kidneys as much as it does the bowels. When the kidney secretion is double its normal

weight, and the acid test double and many times triple, you must not expect anything but aches and pains. But there is a remedy, and that is to increase the elimination by increased water drinking.

For a number of years I have prescribed large quantities of water as a cure and preventive of colds and grip; this year I have used it extensively for influenza, with wonderful success. Do not forget that in influenza the eliminative organs must be made active at once in order to help the system fight the disease.

I direct my patients to take a quart pitcher, and in it put four glasses of hot water with one teaspoonful of common table salt; if the hot water is too nauseating, use cold. After stirring the water and salt well, drink a glass every five minutes until the four glasses are taken. This is what is known as a normal salt solution. It may act as a physic; but if it does not, it will be absorbed quickly, and will start the eliminative organs to work.

I urge an influenza patient to take from two to four cups of hot lemonade after the salt water; so he has taken from four to eight glasses of water in about an hour. If he is situated so he can take a hot foot bath and a sweat, and go to bed, he will be surprised to see how well he will feel the next morning. In influenza the water drinking should be continued, not less than one glass being taken every two hours. This keeps up a good elimination, and prevents complications.



Courtesy Southern Railwaw

Near Cocoanutgrove, Florida



Courtesy Florida East Coast Railway

The Long Key Viaduct

Prevention of Drowning G. Henry Hale

### 1. LEARN TO SWIM

F the large number of persons drowned every year in this country, very few are swimmers. The lesson is obvious; as every one is liable, sooner or later, to be in a situation where a knowledge of swimming might save life, this art is one of the most important, and should be taught to every child. Those who take their children to the vicinity of a bathing place for the summer vacation should, even at the sacrifice of some of their own pleasure, see that the young folks acquire at least enough knowledge of swimming to give them confidence when in deep water. It would be much better for the child to be deprived of some of the subjects in the school curriculum than to grow up without a knowledge of swimming.

### 2. IN DANGER KEEP COOL

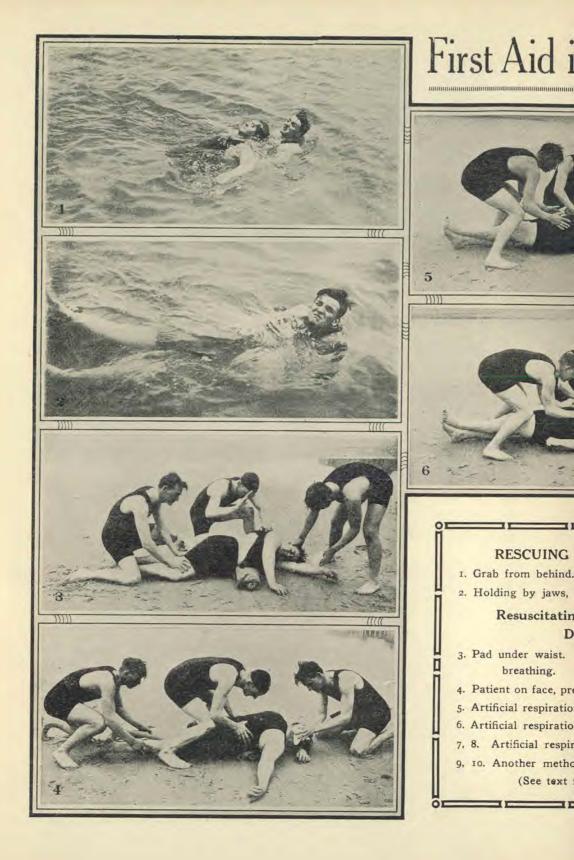
When one finds himself in deep water, if he is not a swimmer, he instinctively reaches his hands up to grasp something. If there is something to grasp, he is fortunate; if not, the thrust helps to send him down. The human body is almost as light as water, and very little movement of the hands and feet while under water, even by one without a knowledge of swimming, will be sufficient to keep the nose out of water. The best position is on the back, or else upright with the head thrown back and the feet and hands making a gentle paddling motion. But every attempt to reach the hands out of the water will send the head under, and every attempt to cry for help will increase the danger of filling the lungs with water. People often drown because they get excited. The important thing is to keep calm, lie with head thrown back, and make sufficient motion with hands and feet to keep the nose out of water. If some one attempts to rescue a drowning person, any attempt to grab the rescuer, if made without proper precaution, may result in the loss of two lives.

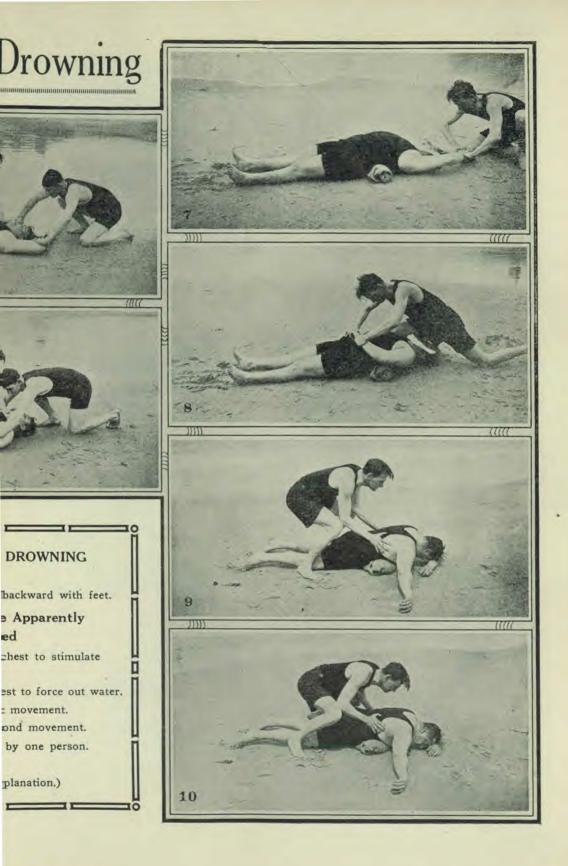
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### 3. RESCUING A DROWNING PERSON

Throw out a plank, or a rope, or push out a boat within reach of the sinking one. If some one swims to the rescue, he should first hastily remove surplus garments and loosen legs of drawers if tied at ankle.

It is unsafe to grasp a drowning person who is struggling, and may cost two lives. It is better to wait until he is quiet. Speak to him in a confident tone, assuring him that there is little danger, provided he keeps calm. Grabbing him by his hair or collar, or under his arms, get him on his back and give a quick pull, which will bring him more nearly horizontal in the water (Fig. 1). Now throwing yourself on your back, draw his shoulders upon your chest. This will bring his head near your chin. Then with a hand holding under each jaw, swim backward, by foot power, making for the nearest landing (Fig. 2). If necessary, one may keep himself and his charge above water for a long time with comparatively little motion. Every swimmer, when in swimming, should practise this movement on a friend until it is perfectly familiar.





To locate one who has sunk to the bottom, watch for air bubbles, remembering, if there is a current, that the bubbles travel downstream some distance before reaching the surface. The body would always be found upstream from the bubbles. In trying to rescue a body, grab it with one hand, using the other to swim.

### 4. TREATMENT OF THE APPARENTLY DROWNED

Of first importance, vastly more so than the summoning of a physician, are two procedures which should be put in operation immediately. First, administering artificial respiration (after emptying the air passages of water), and second, supplying artificial heat. The sooner these measures are applied the greater the chance for recovery. And of these two, artificial respiration is vastly the more important. As soon as the body is out of the water, and without waiting to reach some more suitable spot or to determine whether the patient is dead, he should be laid flat and movements started to restore breathing. Promptness in this regard is the most important life-saving measure. So much importance attaches to a correct procedure in inducing the patient to breathe that every one who goes to the seashore should be familiar with the technic.

Keep the crowd back. Wipe the mouth and nose, and make certain that the patient has not partially swallowed some seaweed or something that might obstruct breathing. Open clothing to expose chest and waist. Roll patient onto his face and lift up at the waist to encourage the running out of water from the mouth and air passages. Place roll of clothing under waist; turn patient on side, and slap the bared chest smartly two or three times (Fig. 3), and let him fall to former position. If there are no immediate signs of life, proceed to drive the water from the lungs by force.

Separate the jaws, inserting something hard between the teeth, to keep the mouth open a piece of wood, or cork, or anything that will keep the jaws apart. Take position as shown in Fig. 4, astride the patient's hips, making pressure at the base of the lungs as long as water flows freely from the mouth; then relax, and again make pressure until the lungs are empty of water. This procedure, which should not take much longer than a half minute, permits some air to enter the lungs.

By means of a handkerchief or other cloth wrapped around the finger, clean the mouth of mucus. Ammonia, aromatic spirits of ammonia, smelling salts, bay rum, or ether, if at hand, may be held to the nose briefly in the attempt to stimulate breathing, but no time should be lost in this way.

### 5. ARTIFICIAL RESPIRATION

Turn the patient on back at once, with the roll of clothing under center of back. One person should with a handkerchief pull the tongue forward. Otherwise it will fall back and act as a valve to prevent the entrance of air into the lungs. Another person grasps the patient's arms at the elbows and first draws the arms up above patient's head and presses them together firmly, for sufficient time to count four (Fig. 5); then lowers them to the side, while another assistant presses down hard against the patient's ribs (Fig. 6) in such a way as to squeeze the ribs and make the chest smaller. The upward movement expands the This alternating expansion and conchest. traction of the chest should be kept up at least an hour, unless a physician has previously examined the heart and pronounced the patient dead. While this alternate movement is being made, the one who holds the tongue changes hands as may be necessary, so as not to interfere with the breathing movements.

If there are other assistants, they should use measures to bring warmth to the body, rubbing the legs vigorously, surrounding them with the warm beach sand, or with hot (but not too hot) water bottles. Rub always toward the body.

### 6. ONE-MAN METHOD

The following is considered by some to be a superior method. It requires only one operator; there is better opportunity for the water to escape; the tongue does not tend to drop back into the throat.

Place the patient as shown in Fig. 3, then kneel as in Fig. 9, with hands pressing the lower ribs. Throw the body forward so that the weight comes on the wrists, the knees, by pressure on the elbows, increasing the force of the thrust (Fig. 10). When the pressure is released, the lungs fill by the elasticity of the chest walls. This alternate pressure and relaxation should be persevered in at the rate of about twelve a minute. Do not make violent movements, as this might injure some of the delicate abdominal organs. Watch for evidences of natural breathing on the part of the patient, and when breathing begins, the pressure movements should cease.

Another method: Go through the preliminary treatment of getting rid of the water. Lay patient on back and roll; draw out tongue and secure it by bandaging over head and under jaw (Fig. 7). Raise arms as shown in Fig. 7, lower as shown in Fig. 8, pressing strongly inward on ribs. Repeat the movements, counting four each time.

When breathing is established, get the patient into a warm bed (all wet clothing removed, of course), surround him with warm bottles, heated bricks, or other heating appliance, and give him plenty of fresh air. Keep the patient quiet for forty-eight hours to prevent congestion of the lungs. Hot-Weather Foods and Drinks

George E. Cornforth

RESH fruits and fresh vegetables should form a considerable part of the diet at all times, for these are the foods that contain the medicinal substances that the Creator thus provides to keep us in health. These medicinal substances are for the purpose of keeping the blood in a healthy condition. But especially in the summer time, when these foods are abundant, and when we do not need so much of the fat foods to keep us warm, nor so much protein, or hearty food, as we need in the winter when the cold weather stimulates us to greater activity, fresh green foods, especially those that are eaten raw, should be used in abundance. It is economy in fuel, and in heat and discomfort in the kitchen, to use raw foods largely at this time of year, and we get from these raw foods the full benefit of the vitamines in the foods.

This is the time to use salads freely, and the hearty part of the diet may be supplied by green peas, shelled beans, milk, and nuts in moderate quantities. Even Graham and whole-wheat bread, shredded wheat, and other whole-grain foods, and macaroni, make their contribution to the protein content of the diet. And let us not forget ripe olives as a delicious summer food and relish. When the dessert is made with milk and eggs (custard, for instance), no other specially hearty food is needed.

It is a good plan to make considerable use of an oil stove in summer time, instead of the regular cookstove. This saves heat and dirt in the kitchen, and the trouble of taking care of a coal or wood stove, and it may be a surprise to our readers to learn that experiments show that, as a rule, oil is an economical fuel, as cheap as coal and cheaper than wood, when the amount of cooking that can be done for the amount of money expended for fuel is taken into consideration. This is due largely to the fact that an oil stove is hot and ready for use as soon as lighted and it can be turned out as soon as the cooking is finished, thus no fuel is wasted in starting the fire and when the cooking is done there is no fuel left to burn out to no purpose as the fire dies down. Of course the comparative economy of fuels varies with different localities and also with the manner of cooking. If a large amount of baking is being done, coal is more economical than oil or gas, but with a small amount of baking, gas and oil are economical compared with coal. When a little baking is to be done with a gas stove, it is more economical to use a small oven placed over one of the burners than to use the gas oven.

If, in the summer time, one desires to cook legumes or those cereals that require some time for cooking, a fireless cooker will be found a great saver of fuel and heat in the kitchen. And a fireless cooker can be easily and economically made at home.

### FLOATING ISLAND

### 1 pt. milk.

- 31 level tablespoons sugar.
- 2 egg yolks.
- A few grains salt.
- $\frac{1}{2}$  teaspoon vanilla or grated yellow rind of  $\frac{1}{2}$  lemon.
- 2 egg whites.
- 3 level tablespoons sugar.
- A few grains salt.

Beat the egg yolks, add the milk, sugar, salt, and flavoring. Heat slowly in a double boiler, stirring constantly, until the mixture thickens to the consistency of thin cream. Do not cook too long, or it will curdle. Remove at once from the stove and set the inner cup of the double boiler into cold water. When somewhat cooled pour into cups in the bottom of each of which is a spoonful of jelly.

Beat the egg whites stiff with the salt, then beat the sugar into them. Drop this mixture by spoonfuls on the top of a pan of scalding hot, but not boiling, water and cook for a few seconds on one side then turn and cook the other side. Then skim these "islands" off and put one on the top of each of the cups of custard and when cold drop bits of jelly on top of the islands.

### BANANA SHERBET

- 1 dozen bananas.
- 2 cups sugar.
- Juice 2 oranges.
- 1 quart water.
- 1 egg white.
- Few grains salt.

Peel the bananas and rub them through a colander. Mix with them the other ingredients, the egg white unbeaten. Freeze like ice cream.

### BLACK WALNUT LOAF

- 11 cups milk.
- 2 tablespoons vegetable oil.
- 1 cup fine crumbs of thoroughly dried bread crusts.
  - 1 cup chopped black walnuts.

1 egg, beaten.

1 level teaspoon salt.

Allow the crumbs to soak in the milk ten minutes, then mix in the remaining ingredients. Put into an oiled bread tin and bake till set. Serve with tomato sauce or cream sauce to which a few green peas have been added.

Black walnuts usually cost only half as much as English walnuts or less, and they have a very enjoyable flavor.

### SAGO CREAM

1 pint milk.

1 cup brown sago.

cup sugar.

1 teaspoon lemon flavoring or the grated yellow rind of ½ lemon.

A few grains salt.

Soak the sago in one-quarter cup cold water twenty minutes, then add to it the milk, sugar, and salt, and cook in a double boiler till the sago is transparent. This will require about twenty minutes. Add the flavoring and pour it into the dish from which it is to be served, to cool.

### EASY SALAD DRESSING

a cup evaporated milk.

1 egg yolk. 2 or 3 tablespoons lemon juice.

1 level teaspoon salt.

With an egg beater beat together the egg yolk, milk, and salt. Then beat the lemon juice, a little at a time, into the milk and egg mixture. The dressing thickens as the two tablespoons of lemon juice are added, but is made thinner by adding more lemon juice.

### BEET SALAD

Cut cold boiled beets into dice. Pour lemon juice over them and allow them to soak for one hour. Pour off the lemon juice. Add a little grated onion, a few chopped ripe olives, and chopped hard-cooked egg. Mix in the salad dressing. Sprinkle chopped nuts over the top of the salad.

### BEETS IN JELLY

¿ ounce vegetable gelatin or agar-agar.

1 cup boiling water.

cup sugar.

a cup cold water.

1 cup lemon juice.

A few grains salt.

2 cups cooked young beets, sliced thin.

One-fourth cup of vegetable gelatin well pressed down is one-fourth ounce, therefore one-eighth ounce is one large tablespoonful. If the gelatin, as you get it, is in long pieces, cut it fine with shears so it can be measured.

Put the gelatin to soak in one quart of water as hot as the hand can bear. After it has soaked one-half hour, turn it into a colander to drain off the water. Put it to soak in a second quart of hot water. In fifteen minutes drain it and put it into a third quart of hot water. After fifteen minutes' soaking, drain off the water again. Cook the drained gelatin in the

one-half cup of boiling water till it dissolves, which will be when it boils up. Strain this dissolved gelatin into the remaining ingredients, which have been mixed together. Put into molds wet with cold water. When cold, turn from the molds and serve on lettuce with salad dressing.

### BAKED POTATOES IN BROWN GRAVY

6 medium-sized potatoes.

1 pint water.

1 small onion.

1 tablespoon cooking oil or butter substitute.

2 level tablespoons flour.

11 level teaspoons salt.

Chop the onion and brown it in the fat, then add the flour and brown it lightly. Turn the hot water into this mixture and quickly stir it smooth with a batter whip. Boil up well and turn over the potatoes which have been pared, halved, and placed in a baking pan. Bake the potatoes in this gravy till done. Dip the gravy over the potatoes occasionally, and if the gravy becomes too thick in the baking, add more water.

### CUCUMBERS AU NATUREL

Place the eucumbers in the refrigerator till they become cold and crisp. Pare them and cut them lengthwise into quarters or eighths, according to the size of the cucumber. Serve on a platter with chipped ice. The strips are eaten with salt as celery is eaten.

### LETTUCE WITH LEMON

Break the leaves from the stalk, wash well in cold water, and let stand in ice water for an hour before serving. When ready to use it, shake the leaves dry. Serve on a salad plate with quarters of lemon. Pass salad oil. Or a dressing may be made of equal parts of lemon juice, sugar, and water. Or mayonnaise dressing may be used.

### CURLED CELERY

Celery is one of the most valued of salad plants, and one of the nicest flavorings. It is best when eaten raw, if fresh, crisp, and tender. It should be thoroughly masticated. To prepare it for the table break the stalks apart, wash and clean them thoroughly with a vegetable brush, rejecting any green portions and tough stalks. Then put it in ice-cold water for an hour before serving. The green portions and tough stalks may be used in making soups.

To curl the celery, cut the pieces in thin strips from the bottom end about halfway up the stalk, not cutting the strips entirely apart, but leaving them fastened together by the upper part of the stalk. When allowed to stand in cold water for a time after being cut in this manner, the strips curl up.

### RADISHES

Select those that are young and tender, cut the stalk off about one-half inch above the radish, clean thoroughly by washing and scraping, and place in ice water. The radishes can be made more ornamental by cutting so as to resemble tulip blossoms. Thin slices of radish make a very pretty garnish for salads.

### CAULIFLOWER

Break off the outside leaves, cut the flowerets from the stalks about two inches below the top of the floweret. If the flowerets are large, divide them. Wash and place the cauliflower in salted water to drive out any insects that may be hidden in it. Steaming is the best way to cook it. It should be cooked till it is just tender, which will require from twenty to forty minutes. Longer cooking will turn it dark colored.

To boil the cauliflower, use a kettle of such size that when the cauliflower is stood in it stem downward it will hold the cauliflower upright. Have in the kettle barely enough boiling water to cover the top of the cauliflower. Add salt when it is about three fourths cooked. Treated in this manner, the delicate top will not cook to pieces before the stalk is tender.

The cauliflower may be seasoned with butter and served with lemon juice, or may be served with cream sauce, parsley sauce, egg sauce, or tomato sauce, or may be served as a salad with mayonnaise salad dressing.

### TOMATO SAUCE FOR CAULIFLOWER

- 1 pint tomatoes.
- 1 small onion, cut fine.
- 2 tablespoons butter substitute or vegetable oil.
- - cup flour. clove garlic, if desired.
  - bay leaf.
  - 1 teaspoon salt.
  - 1 teaspoon thyme.

Simmer the tomato, onion, garlie, bay leaf, and oil together for ten minutes. Stir the flour smooth with a little cold water and stir it into the boiling mixture. Allow to cook till thickened, then rub through a fine strainer. Add the salt and thyme, and water to thin if too thick.

### SUMMER DRINKS

The cereal coffees in powder form are very convenient. There are on the market some herb teas, one, for instance, made from alfalfa hay, which make as good a substitute for tea as cereal coffees are for coffee, and they contain valuable food substances that are more or less medicinal.

### CURRANT NECTAR

- & cup currant juice.
- + cup lemon juice.
- 3 cups water.
- 3 cup sugar.

Mix and set in a cold place till chilled before serving.

### FRUIT NECTAR

d cup sugar. 1 cup pineapple juice.

1 cup strawberry juice.

1 cup raspberry juice.

1 cup cherry juice. Juice 1 lemon.

Juice 1 orange.

Boil the sugar in one cup water. Strain into the juices. Add water to dilute to the proper strength. Set away to cool. Slices of pineapple or a few strawberries or stoned cherries may be added.

### ORANGE NECTAR

11 cups orange juice. cup pineapple juice. cup lemon juice. cup sugar. to 3 cups water. Mix and set away to cool.

### GRAPE NECTAR

1 cup grape juice. ¿ cup lemon juice. Juice 2 oranges. 1 cup sugar. 1 quart water.

Mix and set on ice till ready to serve.

### LOGANBERRY NECTAR

- 1 cup (or more) loganberry juice.
- 1 cup lemon juice.

1 eup sugar. 1 quart water.

### JUNE PUNCH

1 cup strawberries.

- 1 cup cherries.
- Juice ½ lemon.
- a quart water.
- a cup sugar.

Hull, wash, and crush the berries. Stem, pit, and crush the cherries. Mix them, add the lemon juice, and set aside for the flavors to blend. Steep the cherry pits in one cup water for fifteen minutes, add the sugar and boil till sugar is dissolved, then strain and cool, then mix this sirup with the fruit and serve very cold.

### MINT NECTAR

Pour one cup of boiling water over 6 mint sprigs, cover and let stand till cold. Strain and add to three-fourths quart of lemonade. Color green with green vegetable coloring, if desired.

Or instead of lemonade use three-fourths quart of fruit nectar made from any kind of mixture of fruit juices.

Put a sprig of mint on top of each glass when served.

### PINEAPPLE PUNCH

Juice 1 large lemon.

- 1 orange, sliced and stoned.
- | pineapple, grated.

1 cup sugar.

1 quart cold water.

2 slices pineapple, shredded.

Put all except the water and shredded pineapple in a bowl and let stand one hour to extract the juice, then strain and press to get all the juice. Add the water and shredded pineapple. Serve very cold.

### RHUBARB PUNCH

2 stalks rhubarb.

‡ eup raisins.

i cup lemon juice.

- 1 cup sugar.
- 1 quart water.
- A few drops of rose flavoring.

Cut up the rhubarb and simmer it and the raisins in one pint of the water for fifteen minutes. Strain, cool, and add the remaining ingredients. Serve cold. It may be necessary to add more water to make up for what boils away.

A large variety of nectars can be made by using lemonade as a foundation and flavoring and coloring it with a variety of other fruit juices. The flavor may also be intensified and improved by using a few drops of extract.

### CURRANT JUICE

Pick the currants from the stems, wash them, and put one quart of currants to cook in one and one-half cups of water. Boil about twenty minutes, then turn into a double-thickness cheesecloth hag to drain. The juice may be canned as fruit juice is canned.

### PINEAPPLE JUICE

This may be the superfluous juice from canned pineapple, or, to make the juice from fresh pineapple, either grate the pineapple or grind it through a food chopper, then put it into a double-thickness cheesecloth bag and press the juice from the pulp, or press the pulp in a fruit press or a potato ricer.

### STRAWBERRY OR RASPBERRY JUICE

This may be the superfluous juice from canned fruit or the juice may be prepared according to the directions for preparing currant juice. When strawberries and raspberries are canned, there is usually more juice than can be served with the berries; some of this juice may be canned separate from the berries to be used in making nectars.

### CHERRY JUICE

Use the juice from canned cherries or cherry sauce. Cherries are very nice to use in fruit salad. This leaves the juice to be used for nectar.

### GRAPE JUICE

Follow directions for making currant juice. To bottle the juice, add to each quart of the juice two-thirds cup of sugar, boil five minutes, and proceed as in canning any kind of fruit.

### LOGANBERRY JUICE

This juice can be bought in bottles like grape juice, or some of the juice may be taken from canned loganberries.

### Diet in Summer Complaint "'Tis not meet to eat meat in hot weather."

### George E. Cornforth

IARRHEA is more common in hot weather than in cold, probably because the hot weather increases the activity of germs that prey upon foods. Flesh foods, especially, undergo decomposition more readily in hot weather. Milk is much more likely to undergo changes that make it more or less unwholesome in hot weather, and it is more likely to be a carrier of the germs of disease, especially howel troubles. Great care should be exercised in the care of milk at all times, but especially during the summer months. Fresh, raw, green foods are likely to be contaminated with germs that cause bowel trouble; in fact, while some conditions of foods, such as the underripe or overripe condition of fruits, have been blamed for summer complaint, it is probable that germs harbored by foods are more often the cause. For this reason all foods that are eaten raw should be most thoroughly washed and cleansed.

The diet in diarrhea may consist of bland and easily digested foods, together with ripe fruit and fruit juices, the effect of which is to cleanse and regulate the bowels.

The treatment should be begun by a fast of one day and a thorough cleansing of the bowel by hot enemas as hot as can be borne and in as large quantity as can be retained. After this, the diet may include sterilized milk, egg yolks, raw or hard boiled, barley water, rice water, whey, zwieback, corn flakes, wheat flakes, wellboiled rice, browned rice, thoroughly cooked oatmeal and other cooked cereals, gruels, brownedflour gruel, blanemange, cultured buttermilk, malted milk, blackberry juice, raspberry juice, blueberry juice, grapes and other ripe fruit, and most stewed fruits. All food should be eaten slowly and well masticated. Avoid animal foods, fats, fried foods, fresh bread, vegetables, desserts, spices, condiments, tea, and coffee.

### AS WE SEE IT

Conducted by G. H. Heald, M. D.

### LATENT INFECTION AND EPIDEMICS

MEDICAL men are now pretty well agreed that Verneuil announced a great truth, when in 1886 he described latent microbism as "an infection limited to a small area giving rise to no apparent sign, but which may become active owing to some disturbing cause — wound or overwork or lack of rest or indiscretio/ or excess."

It is now well established that a tuberculosis infection may remain latent for years; and there are some who believe that it is usually a childhood infection which for a time — perhaps for ten, twenty, thirty years — is kept under complete control, so that the infection is not even suspected; and then as a result of undue exposure, a prolonged surf bath, a hard cold, an attack of pneumonia, a season of overwork or of undernutrition, the body is so weakened that the tubercle bacilli are enabled to make headway and to gain a better foothold.

Tuberculosis infection in its earlier stages, then, would seem to be a good example of "latent microbism." But this form of infection, so long as it is latent, is not dangerous to others.

There are, however, other diseases in which the carrier harboring the germs, though he may not himself have the disease, may be a menace to others. Perhaps many of our readers remember the case of "Typhoid Mary," a cook who worked in numerous families, and wherever she went they had typhoid fever in the family. For a long time there was no suspicion as to her condition. It is now known that there are many typhoid carriers who, if they are not extremely conscientious and cleanly in their work, may transmit the disease to others.

American army experience in Europe has shown that some soldiers who have not recently been exposed to typhoid may after an exhausting march or after a period of lowered vitality from other cause come down with an attack of typhoid fever; and the belief has been expressed that these men for months must have harbored in their intestines typhoid germs which were comparatively harmless to them until some lowering of vitality or some change in the condition of the digestive passage made an opportunity for the rapid development of the typhoid germs.

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It has been known for years that many people harbor in their mouths pneumonia germs, which seem quite domesticated and harmless. But in those cases of pneumonia that have not been exposed to another case of the disease, is it not more than likely that some sudden exposure has given these germs already in the mouth the opportunity to develop as disease producers? The circus carries a lion for the edification of the young. So long as he is caged he is harmless; but should the cage be damaged and the lion get loose, there might be another story. Some breaking of the cage, lets loose the microbic lion to prey upon the lungs of its host. Perhaps every one harbors in or on the skin a greater or lesser number of the staphylococci, or pus germs; and yet every one does not have boils. They appear to be harmless enough under ordinary circumstances, but some chemical change in the body, brought about by a faulty diet, some increased susceptibility of the skin, some chafing by a stiff collar, or perhaps a combination of all these, may give the germs an entrance into a hair follicle, and furnish them the conditions favorable for rapid growth; then we have the infection known as a boil.

The boil is an excellent example of localized infection, and may illustrate in a general way how nature protects the body by walling up the disease. The germs in the hair follicle multiply and produce poisons. The body immediately rushes an army of white cells (or "pus cells") to the place, and crowds them in so tight around the infected spot that nutrition is entirely cut off. Hence the swelling and pain. The poison is walled in, but the nutrition is walled out, so a little section, the "core," dies and is sloughed off, or separated, from the other tissue. Were it not for this walling-off process, the pus germs would be scattered through the body, causing general blood poisoning. We may conceive that in a similar way nature walls off other disease processes. In the case of tuberculosis, the walled-off places may remain stationary for years, to break out suddenly when some indiscretion or some accident gives the opportunity.

In cases of amebic dysentery, even when the trouble is apparently cured, the amebas may still be found in the intestine, in an encysted, inactive stage; ready, however, to infect some one else if they get into the drinking water, or ready to set up a new attack of the disease in the old patient when some condition of faulty hygiene or some lowering of vitality gives the occasion.

In many cases where the germs are carried by "carriers" they are not walled off, but are free in the body fluids. Thus typhoid germs are often found in the intestinal contents or in the gall bladder, and diphtheria germs and pneumonia germs in the saliva. There is every reason to believe that infantile paralysis, meningitis, and many of the common epidemic diseases may be transmitted by carriers who do not themselves have the disease.

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We may wonder why diseases travel in waves or epidemics, and then die out. The explanation seems to be that during the intervals of epidemics, the lisease is kept alive by carriers. The germ — dehorned and with its teeth pulled, as we might say — remains harmless until the patient's lowered resistance gives it the power to overcome one patient. Then with increased virulence or power of producing disease, it attacks the next victim and the next. Like a fire that begins first as a burning match and soon becomes so hot that it jumps wide streets and melts down stone and iron "fireproof" buildings, so the germ, at first feeble, increases in virulence until sometimes it becomes a veritable scourge. In a general epidemic it is probable that practically every one who is susceptible to the disease has it. Those who are immune do not get the disease themselves but may transmit it to others. Finally, all the susceptible material having been exhausted, the germ remains inactive for a greater or lesser period, until a new crop of susceptibles come onto the scene; then when a favorable opportunity comes for the germ to infect his host, the little fire is started which becomes a conflagration.

### WHY NOT MORE SIMPLE? AN EXPLANATION

RECENTLY we received the following letter from a new subscriber, and thinking that, perhaps, there are others who are troubled in the same way, we give our answer.

"EDITOR LIFE AND HEALTH: Recently I subscribed for LIFE AND HEALTH. I am very much interested in the subject of diet, but it seems very complex and complicated. It would seem that too much or too little protein is injurious to the body, also starches, fats, salts, vitamines, etc.; that certain food mixtures are poisonous; that too much acid or too much alkali is injurious. Then there are the questions of digestion-period; the best amount of refuse; proper amount of water; and the amount of food required, expressed in heat and energy. Also there are other topics, the most important being good cooking.

"Could you recommend a cookbook which will cover all these points, and thus tend toward a proper diet? MRS. W. S. L."

DEAR FRIEND: I was much interested in your query of the fourteenth. I note that you are perplexed as to what and how you should eat, and that instead of helping you in your difficulties LIFE AND HEALTH has, if anything, increased them. Once you supposed, perhaps, that it was a simple matter to prepare and eat food; now it seems exceedingly perplexing, and you wonder whether there is any book that will help you out of your difficulties.

I regret to say that you will not find any book that will directly answer your questions, that is, in simple language. The fact is, the subject of diet is not a simple one, and cannot be made simple or explained in simple words. I do not pretend to know all or nearly all about diet. The men who have studied the deepest into the subject realize most its complexity, and how much more there is for us to learn. Tomorrow there may be some new discovery that will upset some of our most cherished theories. Knowledge, after all, is relative. As the Bible puts it, "We know in part."

Fortunately the human appetite is something of a guide to our requirements, else the race would have perished off the earth long ago. That it is not a perfect guide is quite evident from the fact that appetite varies with different individuals, with customs, etc. People usually like the foods they have been accustomed to, even though they are not the very best; but most people, if they are not taught anything, manage to eat so as to maintain some degree of health.

What we are reaching out for is to find if there is not a way to eat that is more nearly perfect than the appetite will direct — that is, to find out the little niceties in the balance of proteins, carbohydrates, fats, salts, etc., that will give better health than one will obtain by simply following appetite; and right here the "doctors disagree." Some think one thing and some another, and sometimes those who know the least about the subject proclaim the loudest, and are sure they know it all. Some advise a heavy animal diet, some a strictly vegetarian diet, some a lacto-vegetarian diet. This latter is what LIFE AND HEALTH stands for — a diet consisting principally of cereals, milk, vegetables, especially green vegetables, fruits, perhaps eggs, though nuts and legumes (peas and beans) are by no means excluded. If one partakes of such a diet, the protein, carbohydrates, fats, minerals, etc., will take care of themselves. What is most likely to unbalance a diet is the excess of animal food, and the use of denatured foods, such as white flour, bolted cornmeal, white rice, refined sugar, and the like. The use of these denatured foods, which have been deprived of their mineral content and some of the other important ingredients, makes it much more difficult to balance the diet properly. If one understands these few simple principles, I do not think he needs to go very far wrong in diet.

There is a little book on the preparation of foods, "Facts About Food," which is recent and reliable. It may be obtained from the Review and Herald Publishing Association, Takoma Park, D. C., or through this office. Price, 35 cents postpaid. But the subject of dietetics is a growing one. We live and learn. New discoveries are constantly being made, new facts developed. The only way to keep up to date is by reading the current magazines. LIFE AND HEALTH attempts to give the latest facts and discoveries on food and dietetics. For this very reason it is liable at times to be puzzling to readers who have never given this subject much study.

"THERE is a righteousness at the family table not in the least remote from that at the Lord's table. Ten thousand families are hourly asking God's blessing upon a conglomeration of food abominations which, through their certain decomposition within, can make of the body at best but a whited sepulcher."—" The Soul in Suffering," Robert S. Carroll, M. D., p. 237.

### THE CARE OF VEGETABLES

In China and other parts of the Orient, where it is common practice to use human excrement to fertilize vegetable gardens, the natives, though they know nothing whatever about germs, never think of using vegetables in the raw state. Probably the experience of generations has warned them that such foods are not wholesome. In these countries it is also the rarest thing for natives to use raw water. They use, instead, a weak tea. The reason is probably similar. Experience has shown them that the use of such water causes disease. Where ground, water, and vegetables are reeking with organisms capable of setting up disease when they find entrance into the human intestinal canal, we find the natives of the country, as if by instinct, avoiding raw water and uncooked vegetables.

The fertilization of vegetables with human excrement, while not a frequent practice in this country, is sufficiently common to suggest care in the preparation for the table of vegetables eaten uncooked, such as lettuce, celery, and radishes. At the very least, such vegetables should be thoroughly washed. Some suggest that they be immersed for a time in a germicidal solution of tartaric acid.

Not only may such intestinal germs as typhoid fever be transmitted by means of raw vegetables, but amebas and other animal parasites may be thus taken with the food. Whether hookworm infection occurs in this way has not been fully settled perhaps. The most common avenue of hookworm infection is doubtless through the skin of the feet, and contaminated vegetables must play a comparatively small part in propagating the disease. But it may play some part. At least it is always safer to clean raw vegetables thoroughly before they are served, and disinfecting by means of dilute tartaric acid may be safer yet.

ALCOHOL COMF	PARISONS
	ALCOHOL
BEER	( <b>4</b> <sup>1</sup> <sub>2</sub> %)
ALE	(8%)
CHAMPAGNE	(10%)
SWAMP ROOT	(9%)
S. S. S.	(15%)
VARNESIS	(15%)
PINKHAM'S VEGETABLE COM	P. (15%)
WARNER'S SAFE REMEDY	(15 <sup>1</sup> <sub>2</sub> %)
TANLAC	(16%)
PEPTO-MANGAN	(16%)
HOOD'S SARSAPARILLA	(16 <sup>1</sup> <sub>2</sub> %)
VINOL	(18%)
MANOLA	(18%)
WINCARNIS	(19%)
PAINE'S CELERY COMP.	(19 <sup>s</sup> <sub>10</sub> %)
PERUNA	(20%)
WINE OF CARDUI	(20%)
PLANT JUICE	(20%)
HOSTETTER'S BITTERS	(25%) (4. Executed Eable in the Kenner Metal Kanner)

? ? What Is an Alcoholic Drink ? ?

### OUESTIONS AND ANSWERS

Conducted by J. W. Hopkins, M. D., Washington (D. C.) Sanitarium

This is a service for subscribers to LIFE AND HEALTH. If a personal reply is desired, inclose a three-cent stamp. 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.

### Flesh or Mixed Diet

"What effect has a flesh diet or a mixed diet on the human body?"

A flesh-food diet debases the human being mentally, morally, and physically. The blood is rendered impure and diseased, the spiritual life is handicapped, and the mental activity is much disturbed.

The various organs of elimination, as the liver, kidneys, and skin, are overloaded with waste, and the mucous membrane of the respiratory tract comes to a state of chronic irritation.

There are many persons of national reputation who are vegetarians because it is both rational and healthful.

### Obesity

"I am 4 feet 9 inches tall and weigh 160 pounds. Twenty-five years ago I had an operation for the removal of the ovaries, tubes, appendix, and uterus. How can I reduce my weight? Do you recommend thyroid extract? "

Obesity is a difficult condition to treat, particularly when it occurs after the removal of the ovaries. The principles underlying the treatment for obesity are: (1) The use of no foods which definitely increase the weight, as butter, cream, olive oil, nuts, and fat meats; (2) the use of only three or four articles of food at a meal; (3) eating only a small amount of these, masticating them thoroughly. Many physicians place their patients on a very rigid diet, deny them water, give them cold baths, and make them work hard. All of these things reduce the weight, but there is always a reaction in which the weight is increased. You should plan to spend several months in reducing your weight, being satisfied to lose about one or one and one-half pounds a week. If you are under the supervision of a physician, you might possibly use the thyroid extract, but you should not otherwise.

#### Enemas

" Is the frequent use of a syringe injurious to the intestine? If so, what is the best course to follow in the case of stubborn constipation?"

The use of the enema is not injurious if properly carried out. In fact, there are certain cases which can be relieved only by the use of the enema. These cases are those where the lower bowel is exceedingly sensitive and irritable and in which the ordinary methods, as the use of bulky foods, laxatives, etc., do not produce results. However, it is much better to adopt a laxative dietary and to drink two or three glasses of water before meals, an hour after meals, and at bedtime. Exercise is also necessary, general exercises to strengthen the whole body and local exercises to develop the abdominal muscles and to stimulate activity of the intestinal musculature. It is important to cultivate a regular habit of attending to the movement of the bowels. The use of some kind of mineral oil, as Squibb's, in doses of a teaspoonful before meals once or twice a day, with a tablespoonful of bran at meals twice a day, will often bring relief. It is also needful to use an occasional dose of a mild laxative, as cascara sagrada, Epsom salts, or castor oil.

### **Psoriasis**, Dry Tetter

"Please give the cause of, and treatment for, psoriasis."

Psoriasis is a very stubborn disease to treat. We have had the best results with patients who have been persuaded to adopt a strictly vegetarian diet, restricting also the use of eggs and milk, and using a large portion of rice. Dry legumes, as peas, beans, and lentils, should not be used. We have had best results with either an ointment containing salicylic acid or sulphur. It is better to use one remedy for a time and then change to another. The internal treatment should be under the direction of your local physician. The disease is supposed to be hereditary in about five per cent of the Anything causing internal disturbance cases. is likely to aggravate the trouble, especially digestive disturbances, such as the use of tobacco, alcohol, coffee, and too much protein food. It is curable in many cases, but has a tendency to recur. A course of hydrotherapeutic treatments, calculated to raise the general health, is also advisable.

### Sick Headaches

"What treatment do you prescribe for sick headaches, and what is their cause! Can rheumatism be caused from the teeth?"

For sick headaches we divide our treatment into that for the attack and that given between the attacks. At the time of the attack, we generally give a Seidlitz powder in hot water to cleanse the stomach and to move the bowels. We follow this with a thorough enema and with fomentations to the spine, stomach, and abdo-men, a hot foot bath, and a cool sponge. We generally use cold to the head during this treatment, but occasionaly have cases in which the headache is more quickly relieved by hot applications to the face and cold to the base of the brain, and for the next application reversing the process, giving cold to the face and hot to the base of the brain. This alternate hot and cold to the head and face gives great relief if combined with the hot foot bath. Sleep and rest are essential during the attack.

Between the attacks, the fundamental causes should be ascertained and removed. These may be eyestrain, decayed teeth, nose and throat diseases, valvular trouble of the heart, renal diseases, or constipation. The patient should be much in the open air, endeavoring to sleep out of doors, if possible. A certain amount of exercise should be taken daily, graduated according to the strength of the patient. Some exercise which will give evidence of productiveness is to be chosen. Gardening, sawing wood, etc., are excellent, while golf, croquet, and tennis have their advantages.

The diet should be free from sugar, and should have a sufficient amount of agar, celery, lettuce, spinach, or other roughage. Animal proteins should be eliminated entirely, and the vegetable proteins be kept down to a minimum. It is often necessary to use an enema at night in addition to the above diet, as there is a certain amount of irritation of the rectum which is relieved only by the temporary use of the enema. The enema should not be hot, a temperature of 90° to 95° being sufficient, and best results are often obtained by a second small cool enema at 70° or 75°.

It must not be forgotten that the continued use of eaffeine, as in tea, coffee, coca-cola, chocolate, and cocoa, aggravates and often produces these headaches. These drugs should, therefore, not be used as beverages. Resort should not be had to the various headache cures, and neither should the patient be satisfied to drift along depending upon the use of aspirin, etc.

The physician should be consulted early concerning the cause of this trouble, and the case should be placed in his hands. Gastric disturbances and pelvic disorders have their relation to this trouble.

Rheumatism is sometimes caused by decayed or abscessed teeth. This condition can generally be recognized by the dentist either with or without the aid of the X-ray.

### Gravel; Night Sweats

"Will you please prescribe treatment for gravel, complicating pregnancy of "seven months. What causes night sweats, and what shall we do for them?"

For a pain in the right side and gravel in the urine during pregnancy, there should be an examination of the blood pressure and of the urine between times, when there is no blood passing. It seems to me the condition is quite serious, and that there should be care to prevent any further complications with the pregnancy.

Night sweats are often caused by weakness, by too many covers, improper ventilation, etc., but if there is a growing weakness with a gradual loss of weight, the individual should have the lungs thoroughly examined.

### Treatment of Rheumatism

"What do you think of the use of the combined salts of sodium and lithium in the treatment of rheumatism? What is the proper treatment?"

The combined salts of sodium and lithium may be occasionally used in the treatment of rheumatism, but for a short time only. The continued use of any saline is harmful, and these combined salts are no exception to the rule, for if continued they will produce a chronic irritation of the mucous membrane of the gastrointestinal tract and also disturb the kidneys. The sluggish condition of the liver and bowels found in rheumatic conditions is better remedied by a laxative diet, by drinking sufficient water, and by hydrotherapeutic treat-ments to the liver and abdomen. Such treatments are fomentations, or alternate hot and cold applications, massage to the abdomen, and the moist abdominal girdle, worn at night. If the fomentations to the abdomen are combined with fomentations to the painful parts and a hot foot bath, perspiration will be induced, and thus much of the waste matters will be carried off. Gentle cool sponges or cold-mitten frictions will raise the general health, acting as tonics.

The local tenderness and soreness may be treated by the application of some ointment containing oil of wintergreen, mustard, or some other mild irritant, and this application followed by wrapping the joint with cotton batting or with flannel. The tonsils and teeth should also be attended to. Any source of infection should be removed.

### Bleeding Piles

"Is there any danger in bleeding piles? I do not see that they affect my health."

Piles, or hemorrhoids, are a symptom of other disturbances, such as liver trouble or constipation. They should be cured, both because of the irritation which they cause and because the condition which produces them should be removed. They produce and aggravate constipation, thus causing retention of waste matter in the bowels, with consequent poisoning of the body by means of absorbed products from the intestines. Headaches, disturbances of the circulation, etc., are a result of this trouble. The person may feel in fairly good condition, and yet when the piles are cured or removed surgically, he will experience so much better health that he will see how much he was affected by them.

### Nice, Fluffy Hair

. "In summer my hair gets abnormally oily, and when I shampoo it, it lies flat, as if it were plastered to my scalp. By the time it regains its lightness — in about two weeks — the oil has again accumulated so that I must again shampoo. In winter my hair is light and fluffy. What can I do to have it so in summer?"

Try a soapbark shampoo, made by adding sufficient tincture of soapbark (Quillaja saponaria) to the water to make a lather.

### BOOK REVIEWS

### The Soul in Suffering

by Robert S. Carroll, M. D. The Macmillan Company, 1919, New York. Price, \$2.

In his Foreword the author says: "The greatest privilege of the physician's work is his welcome into the intimacies of his patients' inner lives. Day and night the busy practitioner is in close touch with the souls of the sick. . . The following chapters have been written with a constructively sympathetic understanding of the soulneed which comes to the suffering." The tone of the book throughout indicates the author to be indeed a "beloved physiclan;" for he writes with the sympathy of one who loves his fellows because he understands them in their deepest needs.

The book is a philosophy of life with a high spiritual tone, and breathes courage and helpfulness on every page. Many of the statements are so striking that we have taken the liberty of using a number of them as inserts in this issue of LIFE AND HEALTH.

### NEWS NOTES

#### Influenza in South Africa

During the four months when the epidemic raged, more than 40 per cent of the inhabitants of South Africa had influenza, with a mortality of 5 per cent. There were more than 2,600,000 cases, with a fatality of nearly 140,000. The fatality among Europeans was about half what it was among the natives.

### Influenza in the Pacific Islands

In that part of Samoa formerly owned by Germany more than a thousand children were left orphans as a result of influenza. Eight thousand deaths were reported, mostly men. At one time so large a proportion of the population were prostrated that there were not sufficient persons left to care for the sick, and it is stated that many died of starvation who might have recovered had they had adequate care.

### Lessons from Draft Rejections

What may we learn from the large percentage of rejections in the selective draft physical examinations? First, that the flower of our land the youth of military age — are only three-fourths fit. Second, we should realize that much of this unfitness could be prevented by proper care in the home and during school age. There is no reason in the world why 95 per cent of all babies born, if given the best advantages in nutrition, air, exercise, etc., should not come to manhood and womanhood in fit physical condition.

#### National Physical Unfitness

The Provost Marshal General has summarized the data regarding the physical qualifications of the men examined under the selective draft law, for military service. Of the 3,208,446 men examined, 16.25 per cent (521,608) were rejected as absolutely unfit, 70.41 per cent (2,259,027) were accepted as fit. There were also 2.76 per cent suffering from conditions deemed remediable by proper treatment, and 10.48 per cent of substandards, fit for limited service. These young men of draft age, supposedly the cream of the national health, were only 70 per cent fit, 16 per cent or 1-6 unfit, and 10 per cent or 1-10 partially unfit. This is a huge object lesson indicating the urgent necessity of the nation's doing some medical house cleaning in the way of education and public health administration.

### The Low Cost of Living

We hear very much of the high cost of living, but we overlook the fact that many of the best things of life can be had for nothing.

It costs nothing to stand up and walk and breathe properly.

Fresh air in the home is free.

No expense to taking a few simple exercises every morning.

It costs nothing to chew the food thoroughly.

It costs nothing to select the food best suited to the body.

It costs nothing to clean the teeth twice a day. It costs nothing to stop using patent medicines.

It costs no more to read good books than trashy literature.

It costs nothing to have a cheerful, happy disposition, and stop having grouches.

These things cost nothing, yet they will bring content and reduce the doctor's bill to nothing a year.— Toronto Health Bulletin.

### The Nursing Situation

Owing to the scarcity of nurses, medical men are considering ways and means of overcoming the difficulty. A commission, including the health commissioner of New York City, met in the New York Academy of Medicine, May 19, to discuss the situation. Dr. Chapin recommended a shorter hospital training course with an ample bedside experience as being sufficient to fit women to take care of most cases of illness. For nurses' aids he recommended a one-year course, without the necessity of a high school training. At the present time, according to Dr. Chapin, the hospitals help to make up their annual deficit by exploiting the nurses, keeping them for long periods doing work which in no way prepares them for their future work. He might have mentioned some other institutions besides hospitals.

#### Influenza Germ Discovered?

According to the London *Times*, what may prove to be the true influenza germ has been discovered by Maj. H. Graeme Gibson, Major Bowman, and Captain Connors, of the Allied Army Medical Services. The germ belongs to the class of microbes that are small enough to pass through fine porcelain filters, and is probably ultramicroscopic. — that is, too small to be seen by the ordinary microscope. Major Gibson was a martyr to science, for while experimenting with the new germ, he was infected and lost his life.

### England's Physical Fitness

The reports of England's medical examining boards show that of every 9 recruits examined only 3 were fit for service, 2 were able to do something, 4 — nearly one half — were unfit for any army service. Some of this wreckage was absolutely hopeless, most of it the result of preventable causes.

### No Cancer in Arctic Region

According to arctic explorers, the latest being Stefinsson, cancer does not exist in the Far North. In view of the fact that the Eskimos live almost entirely on meat and hardly ever see vegetables, Dr. Ross (*Lancet*, March 29, 1919) suggests that the theory that meat eating is the cause of cancer is not well founded. Ross tends to the old view that cancer is a parasitic disease, and that the parasite, for some reason, is unable to find a suitable environment in the severe northern climate.

### Whites and Blacks

Considering the fact that the death rate among the blacks is always higher than among the whites, it is surprising to learn from the Provost Marshal General's report that there was in the selective draft a larger percentage of fit among the Negroes than among the whites, the percentages of fitness being, respectively, 74.60 (blacks) and 69.71 (whites). But there is another side to the story ; among those rejected for absolute unfitness there were 17.32 per cent among the Negroes as against 16.08 per cent among the whites.

#### A World-wide Scourge

According to the Medical Record, "It is plainly evident that no former outbreak of influenza was so world-wide as the recent one, and probably none so destructive to life. This, however, can be easily understood; first, because means of communication are so easy; and second, when any infectious disease falls on virgin soil [places not partially protected by former visits of the disease], and when sanitary and all preventive measures are lacking, it always spreads rapidly and is of a very deadly nature."

### Public Health Administration

The report of the Provost Marshal General on the rejections from military service on account of physical unfitness shows some remarkable conditions. For instance, certain States which have little or no public health administration have fewer unfits than some States which have been leaders in public health work. In Arkansas there were 13.08 per cent rejected as unfit, and in Oklahoma 9.78 per cent, as against 18.86 per cent in Massachusetts and 19.31 per cent in New York. Possibly this may be explained partly by the large foreign and large urban populations in these Atlantic States.

### Protect from Whooping Cough

Whooping cough is one of the most serious diseases affecting young children. Last year 200 California children died of this disease, and 10,000 children of the United States were victims of this preventable disease. The story of whooping cough is not told in the deaths due to this disease alone, for the sequelæ are often more disastrous than the disease itself. Tuberculosis follows whooping cough more often than any other disease of childhood. Young children, therefore, should be more carefully protected against whooping cough than against any of the diseases that are common to children. Not to do so may affect the health of the child during his whole life.— Bulletin California State Board of Health.

### **Radium Treatment**

According to Joseph B. Bessel, M. D., New York, in the Scientific American Supplement, March 15, more than ten years of successful achievement in the great bospital center of Europe, has demonstrated the efficiency of radium emanation used internally, in kidney disease, arteriosclerosis, rheumatism, and some other conditions not generally considered curable. These diseases, and also malignant growths, are now looked upon as either curable or controllable to a large degree by radium therapy properly administered. But radium in unskilled hands may have disastrous results.

### Factory Smoking

Recently there was an important hearing on fire prevention before the State Industrial Commission in New York City. A number of witnesses mentioned the danger caused by smoking in factories. The suggestion was made by one person that the smoking regulations be so amended that they would prohibit all smoking within the factory buildings. The same person also called attention to the fact that employees lighting cigarettes or cigars when leaving the building grently increase the fire risk, owing to carelessness in dropping lighted matches.

### More Diseases Notifiable

Owing to the return of infected soldiers from the various seats of war, an order has been issued in England requiring that the health authorities be notified of the existence of cases of malaria, dysentery, trench fever, acute primary pneumonia, enteric fever (typhoid), relapsing fever, and typhus fever. As soon as the attending physician is aware that he has a case of one of these diseases, he is required to give immediate notice of the fact to the health officer of the district.

#### A Symposium on Alcohol

The New York Medical Journal of May 31 has a symposium on alcohol, containing the following articles: "What Constitutes an Intoxicating Beverage?" "Alcohol and the Individual;" "Some Psychological Aspects of Alcoholism;" "Alcohol in Some of its Social Compensatory Aspects." Most of these papers are based on psycho-analysis, and all are against the principle of prohibition.

#### Tuberculosis Work in France

There is much need in France for tuberculosis clinic work. Edith Wharton's War Charities, cooperating with the French government, is carrying on this work, but, of course, needs funds with which to do it. It is said that \$4,000,000 is needed for this purpose. Two friends of the organization have promised \$100,000 if the remainder can be raised.

#### Farming the Ladybug

Entomologists have called attention to the value of the small beetle commonly known as "ladybug" as a destroyer of plant lice. Something like 100,000,000 ladybugs were to be distributed in Washington (State) this spring. This is the most extensive experiment thus far tried on utilizing the ladybug for plant protection.

### Aged Hygienist Dead

Dr. William Henry Hale, graduate of Yale University Medical School, and one of the founders of the American Association for promoting Hygiene and Public Baths, died May 3, aged 78 years.

### Violation of Narcotic Law

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In a recent Chicago raid, \$25,000 worth of opium was seized, and five Chinamen were held for violation of the Harrison Anti-Narcotic Law. England has a national Birth Rate Commission, which is making investigation of the declining birth rate and its effect upon the empire.

#### Bust of Gorgas Unveiled

March 7, a bronze bust of former Surg-Gen. W. C. Gorgas, U. S. A., was presented to the surgeon-general's library, Washington, D. C., General Gorgas himself being present, as well as a number of eminent army medical men and the Secretary of War, Hon. Newton D. Baker.

### The Elixir of Life

In its issue of April 5, Medical Record, in a review of "A Doctor's Discovery, or the Elixir of Life," published in Edinburgh, says: "Dr. Hadden [the author] for many years has written on vegetarianism and the benefit to health of eating sparingly. Moreover the author has practised what he preached, and declares that personally he has proved that such a mode of dict is the true elixir of life. The book is well and interestingly written, and a good deal of the advice given might undoubtedly be put into practice with advantage by perhaps the majority of people."

### The Bacteria of Influenza

In the Journal of Experimental Medicine, Baltimore, Pritchett and Stittman report the results of their examination of the bacteriology of influenza. According to their investigation, the influenza bacillus was found in 93 per cent of all cases of Influenza and broncho-pneumonia studied. It was, however, also found in the mouths of 43 per cent of the normal individuals examined. It was also found that the types of pneumonia germ found in the pneumonia following influenza, were the same as those that occur in normal mouths. In other words, it takes more than the germ to bring on an attack of the disease.

### Poisoning by Shoe Dye

Stifel (Captain, M. C., U. S. Army, Jacksonville, Fla.) reported in the Journal A. M. A., Feb. S, 1919, a number of cases of severe poisoning from the use of a shoe dye containing nitrobenzene. The victims were usually young officers who had had their tan shoes dyed black at a certain shop, to match their puttees. The symptoms were nausea, vomiting, severe headache, and cyanosis, or turning blue. An inspection of the blood showed the presence of methemoglobin, and a marked fall in the number of red cells. It is said that the poisonous properties of the dyes in a few days pass from the shoes, so that after three or four days it is safe to use them.

### Bill in Aid of Tuberculosis

State Senator Julias Miller, of New York, has introduced into the New York Legislature a bill providing that the expense and care of poor tuberculosis patients be borne one third by the State. one third by the county, and one third by the individual or his friends or some private source. Senator Miller states that there are in New York City alone 32,048 tuberculosis patients, and that there are hospital accommodations for only about 5,000.

### World Vegetarian Campaign

"Conditions were never riper." says the Dearborn Independent, "for a world vegetarian campaign. When meat was plentiful, it mattered little how much the dictitians decried the food value of meat, nor how much the physiclans alluded to its possibilities of harm to the body; it was procurable, and it remained the staple of American meals. But with high costs and scarcity the economic urge is likely to do what reason could not — diminish our flesh consumption.

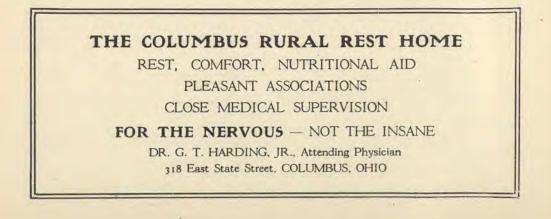
#### A Normal Shoe for a Normal Foot

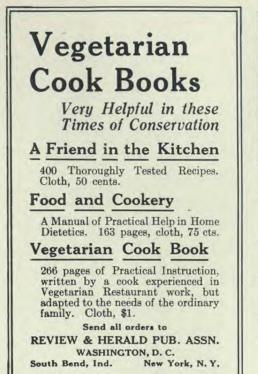
Can the shoemaker build a shoe that will keep normal a normal foot? And having built it, will the public be brought to see the beauty of the product? Not so many years ago we gave our admiration to the small, tightly laced waist. Today we laugh at it, and tomorrow we shall be equally amused by the pencil-point toes and high heels that tilt the human foot to the angle of a horse's hoof. The war made low heels beautifui on Fifth Avenue, and consequently on Main Street; if it had lasted a little longer, women would, of necessity, have gone the whole way with the shoe problem. The shoes of the future will not be "prescription" shoes, they will not cater to deformities, but they will be built to conform to the normal lines of the foot.—*The Trained Nurse*, *June*, 1919.

### The Home Study Habit

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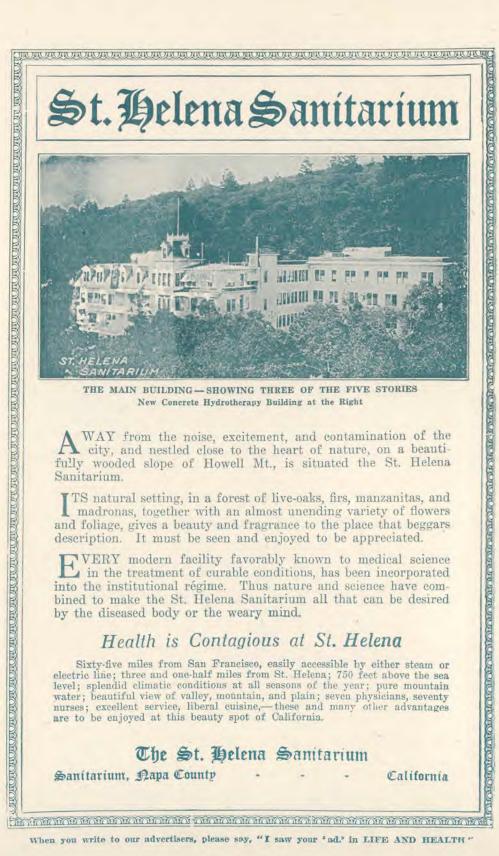
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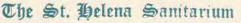
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