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NATIVE HOME IN THE PACIFIC ISLANDS

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AT HISTORIC WATERLOO.

General Articles

Vitamines

By David Paulson, M. D.

A few weeks ago, while visiting, a friend took me out driving. Before we returned, a buckle came loose in the harness, the horses became frightened, and almost in an intant they upset the carriage. Nothing was wrong except an insignificant buckle, but that speedily made everything else wrong.

Dietetic Buckle Loose

Some recent wonderfully interesting dietetic discoveries indicate that there has been a "buckle loose" in our diet. This "missing link" has brought many a well-meaning mental to grief, for it is still true that people *are destroyed for lack of knowledge.*"

Some years ago, Professor Eykman, of the University of Utrecht, Germany, was in Java studying a very prevalent and almost incurable Oriental disease called beriberi, somewhat resembling our scurvy. He was impressed with the fact that it was particularly those who lived almost exclusively on *polished* rice who had the disease.

Pigeons Destroyed by Polished Rice

He then undertook to feed pigeons on polished rice, and made the interesting discovery that in three weeks' time they became ill, began to be crippled, were unable to hold up their heads, and even their throats became so paralysed they could not swallow, and in another day or two they would die, from a condition strangely resembling the beriberi n human beings.

Then Eykman took the shavings that had been removed from the polished rice, soaked them in water, passed a little of this fluid down through a tube into each sick bird's crop, or in case of the birds that had not reached the stage where they could not swallow, fed them a little of these rice shavings. And then this astonishing thing happened: in three hour's time, they began to recover; and before the day was over, they were apparently as well as ever. It seemed like a veritable miracle.

In other words, God had put into the covering of the rice something that the birds absolutely needed, and nothing else could replace it. As little as three tenths of a grain of this mysterious substance was all that was necessary for the restoration of their health. Other observers noted that all over India and some of those other exclusively rice-eating countries, as soon as our modern polished rice was introduced, the people began to have diseases something like scurvy. The teeth became loose and fell out, and inflammation of the nerves was developed. It was also soon observed that when the old fashioned rice was reintroduced, the disease disappeared.

Discoverer of Vitamines

Three or four years ago, Casimir Funk, in England, undertook to isolate this mysterious substance that was present in unpolished rice, and also to determine what other foods contained it, and by what means it is destroyed, and what influence it has on health.

He was fortunately successful in his search, and named this absolutely indispensable substance "vitamine." He also made the important discovery that when fowls were fed exclusively on our modern steel roller process white flour, in three weeks' time they were afflicted just the same as when they were fed on polished rice.

In other words, the vitamines are in the

outer layers in the wheat, just as they are in the rice. The ordinary fine flour that everybody wants in order to have nice white bread has the vitamines eliminated. God put the vitamines in the bran, and in the yellow layer immediately under the brain, that the modern miller knows so well how to separate from the flour.

Why Certain Foods Produce Scurvy

It is generally known that in former days, when sailors were fed for a number of weeks on canned meats and other dried foods without any fresh foods or green stuff, they would ultimately develop scurvy. Their gums became diseased, certain nervous and digestive symptoms appeared, and in a short time they became entirely prostrated, just as the pigeons did when fed on polished rice. And it is also known that if these sailors could get into some port and secure some green stuff to eat, in a few days they would recover.

Dr. Evans, formerly health commissioner of the city of Chicago, says that few of the ordinary people ever develop this *extreme* type of scurvy. "Yet a large part of the population will have a 'touch of scurvy' each year. With some it will go no further than repeated spells of bad breath; with others, a multitude of vague aches and pains variously called rheumatism, sciatica, lumbago, gout. With others there will be attacks of sore gums. With others the face will be pale and a little bloated, with dark circles and slight bloats around ths eyes. With others there will be patches of skin eruption. The reason is plain: for several months we have lived on 'hog and hominy,' or what is equivalent to it. Certain needs of our system have not been met." Dr. Evans adds, "This is the season of the year when raw carrots are good for the complexion."

Wonders of the Human System

The thyroid gland, or Adam's apple, as it is sometimes called, produces a secretion that is absolutely indispensable to the human body. Children who are born with little or no thyroid gland grow hair resembling that of a horse. They are simple-minded, with no more intelligence than a monkey. Their faces appear shrunken. They are a pitiable sight to behold.

Some years ago it was found that if fresh thyroid glands are secured from a slaughter house, and thyroid extract is scientifically separated and given to such children, in a few months' time they generally blossom out and become like other children; giving a striking illustration of how abosolutely essential the thyroid gland is to the normal activities of the human system.

There are a number of other equally indispensable substances, or "hormones," as they are called. We are now beginning to realize that the body cannot make these essential and indispensable substances out of protein, starch, sugar, and fats. It is believed that vitamines are the *mother* substance for the thyroid extract, for pepsin, and these other wonderful ferments which are present in such minute quantities in the body, but which are absolutely necessary for its normal activity.

Foods that Contain Vitamines

When people live on the fruits, grains, and vegetables that God originally provided for Adam (Gen. 1: 29), and refrain from entirely spoiling them by so many of our modern processes and inventions, there is no danger of having a "touch of scurvy," and many other similar diseases.

In 1830 Sylvester Graham led out in one of the mightiest of health movements. Many people who had been considered incurable, were restored to health by adopting his dietetic ideas.

What was the secret of it?—He advised his converts to eat whole bread, which other people were despising, just as the nations of the East are begining to despise unpolished rice, and suffer in consequence. He introduced the people to a normal, natural dietary. He taught them the importance of fresh green foods containing vitamines in all their strength. He hit on the idea of giving the people the very foods that modern science has now shown contain vitamines. We are

just now beginning to learn more fully the scientific reason for the things he recommended.

Raw milk contains vitamines—more in summer than in winter, for then the cows have access to green things, which are particularly rich in vitamines. Raw meat also contains vitamines, simply because the animal has eaten food containing it; for as far as we know now, only the plant world can manufacture them. All *whole* grains contain them. So do yolks of eggs. Potatoes and carrots are particularly rich in vitamines. Green garden truck is a vitamine food par excellence. So are legumes. And limes, oranges, and lemons are especially so.

How Vitamines Are Destroyed

Vitamines may be *peeled off* from the grains, may be *burned* out by high temperatures, and are invariably destroyed in the exclusively *dried* foods. Baking heat, generally speaking, destroys vitamines. Persons who live exclusively on baked and toasted foods, and fail to add to their ditary others containing vitamines, will sooner or later begin to suffer with symptoms of some of the various deficiency diseases.

Who has not observed over and over again, fat, healthy looking babies when they left their mother's breast, then again when they had been fed a few months on condensed milk and patent baby foods with the vitamines burned out of them, on white flour bread from which the vitamines had been removed in the modern milling process, and on sweets and a few other foods that may have been wholesome and nourishing in themselves, but vitamineless—who, I say, has not seen such children become pale, anæmic, scrawny, nervous, and begin to develop rickets, for exactly the same reasons that the pigeons became ill when fed on polished rice? A few teasponfuls of vegetable broth added to their food, a few fresh foods, and gruels made from genuine old-fashioned whole wheat flour (ata) would in most instances have restored them completely to health.

New Light on Pellagra

Thoughtful observers are beginning to believe that pellagra, like scurvy and beriberi, is a difficiency disease. It is particularly prevalent among people who eat little or no green garden truck or other foods containing vitamines, but who live largely upon corn bread from which the vitamines are removed in the milling process and burned out in the baking, and on roasted bacon, which of course contains no vitamines, for the same reason.

Dr. Deaks, the Panama Hospital pellagra specialist, cures a large number of these patients by feeding them principally on vegetable foods, such as lettuce, celery, onions, carrots, tomatoes, spinach, beets, peas, string beans, also fresh fruits of all kinds, and eggs; and he insists that these patients religiously avoid cane sugar.

Dr. Combe, an eminent European specialist, believes that pellagra is due to a diet deprived of vitamines. It is of course not yet absolutely established that this is the only cause of pellagra, but is certainly significant that the most successful cures are secured by feeding the patients on a food that is rich in vitamines.

Other Deficiency Diseases

There are many specialists who are beginning to believe that tuberculosis is largely a malnutrition disease; that the tubercular germs flourish in soil that has been made *favourable* by living upon a one-sided diet that was especially deficient in vitamines.

Cancer is probably another deficiensy disease. One thing is certain,—that cancer is almost unknown among those who are living close to nature and on a natural, wholesome dietary. We shall no doubt have positive evidence, in the near future, that *predisposition* to many other well known diseases is induced by living on a diet that is deficient in these important, mysterious, protective substances, which are so absolntely essential to the normal function of the human system.

It must also be plain that such conditions cannot be cured by merely swallowing drugs, but only by a *reform* in the diet.

Too Many Inventions

Some of our many modern inventions and improvements are undoubtedly a snare of the devil, for which we are paying dearly in human suffering. For example: whole rice contains nearly four per cent mineral matter, while the polished rice, which nearly everybody is eating, contains only *one eleventh* as much. That is what we sacrifice for appearance.

The best part of our wheat, from a health standpoint, is taken out by the modern steel-roller milling process, because people want *white* bread. The old-fashioned stone burr miller furnished us all the vitamines and the mineral matter in the flour, because he did not know how to remove them. But the new fashioned process takes them practically all out; and what is left, and served on every modern table, is just as much a deficiency food as is polished rice, and if used by itself, would produce disease just as the polished rice did to the pigeons. Much of our excessive cooking and baking is unquestionably a curse to humanity—the cause of many of our deficiency diseases.

Worshipping False Gods

We are surprised that the children of Israel worshipped idols and went after false gods. But have we not also been chasing after false gods? We have sold good, wholesome food to the market, and then bought some of it back, paying several prices, for the sake of having it put up in fancy packages with the vitamines "processed" out of it.

Then we have gone to a doctor, and begged him for a prescription, which we did not need nearly so much as we needed to be reformed. We have carried the prescription to the druggist, and paid him to put it up for us, and then taken it according to the directions, and still continued to go astray.

Shall We Dispense with Physicians?

By no means. The conscientious and intelligent physician knows that diseases do not come without a *cause*, and he endeavours to trace human disorders to their source, to point out what needs to be avoided and what needs to be done. He knows that he can no more heal the sick than the farmer can *grow* corn. What the farmer can do is to *cultivate* corn. What the physician can do is to cultivate health, and that is what he is paid for doing.

We are fast coming to appreciate that health instruction is ten times more important than "drops," which in many instances are only another symptom, and permit the patients to be comfortable when they are really miserable.

Neuralgia

By J. J. Bell, M. D.

The term Neuralgia, although applicable to painful sensations along any nerve, is most often applied to a chronic pain occurring more or less frequently along the distribution of the termination of the fifth nerve. This nerve, in addition to other functions, supplies the face and teeth with sensation.

The pain of neuralgia is due to irritation of the nerve along some part of its course, and is most often in all probability due to toxins or waste products, possibly of nitrogenous origin.

In some instances, as in the case of a decayed tooth, the nerve endings may be irritated.

Cold and damp are especially prone to aggravate a neuralgic condition. The lack of certain elements in the food may also be a factor, the nerve not receiving the right kind of nurtriment. Pressure along a nerve-trunk due to new growths or inflammation of the surrounding tissues is sometimes responsible. Perhaps it would be safe to say that the most frequent of all causes is the consumption of tea and coffee, the caffeine in these acting as a nerve-poison. The use of

flesh meats, containing as they do uric acid, may also be another factor in the causation of this disease. Nicotine, the poison present in tobacco, must receive its due share of blame.

In all cases, it is a good plan to ascertain, if possible, the cause of the trouble and have this removed. Fomentations, a hot water bag, electric light applications, gentle massage, and the galvanic current, are amongst some simple home remedies which give relief. Decayed teeth should receive the attention of a skilful dentist. Thought should be given towards supplying the system with a pure, wholesome, nutritious dietary and an abundance of fresh air. Daily exercise out of doors is one of the best remedies, not only for restoring diseased nerves, but also for maintaining the health of the body. An abundance of pure soft water taken one or two hours before meals will greatly aid in the elimination of toxic substances.

Shall We Vaccinate?

Sympathy for Mothers Who Oppose It—Their Fears May Be Allayed

BY LAURETTA KRESS M. D.

You mothers who are harrowed over having the children vaccinated, have my sympathy. Of course you feel that *you*, rather than the legislature, have the right to decide concerning the question.

But you must not forget that smallpox was once a formidable disease, and that occasionally yet it appears in a virulent form. Smallpox once swept this country and Europe with frightful epidemics, claiming its multitudes, and leaving in its wake those disfigured, maimed and often blind or deaf, for the remainder of their lives.

How Vaccine Was Discovered

Finally, about the beginning of the eighteenth century, a British physician named Edward Jenner discovered that milk-maids who had cowpox, a disease communicated by infection of their hands from the cow, did not have smallpox. Using this as a basis of investigation, he proved the value of vaccination. A young boy was first inoculated, or vaccinated, with cowpox lymph. Six weeks later, he was vaccinated by the use of smallpox virus; and as Dr. Jenner predicted, the boy did not take smallpox.

A Boston Physician Experiments

A Dr. Waterhouse, of Boston, is said to have first brought active vaccine virus from England and vaccinated his family. A few months latter, he permitted two of his children to visit a smallpox hospital for the purpose of testing their immunity. They did not take the disease.

Since the days of Jenner, vaccination has been widely practiced, in spite of continuous opposition.

A method first used was the transfer of virus from one individual to another; but a possiblity of transferring disease led to the abandoning of this method.

The Care in Preparing Vaccine

Whenever I hear a mother say, "I do not want that poison stuff put into my child's arm," I think of the visit I paid to an institution where vaccine was manufactured. The remarkable care used to have a perfect product has forever removed from my mind any prejudice against smallpox vaccine. Young calves were used to obtain the serum, and every step in the work was done with aseptic precaution. After the serum was obtained, the calf was killed, and a microscopic examination of its tissues was made, to be sure these were healthy; and finally, a test was made from every "batch" of the inoculating fluid, and its reliability was not established until all this was done.

You may have noticed that there is only a tiny bit of the vaccine fluid in an air-tight tube. It is designed to produce but a mild indisposition; and if it does not make the

child a little sick, then it does not "take" and he is not protected from smallpox.

The point I want to make is, that there are other sources than the vaccine to cause trouble in the matter of vaccination. The physician may be careless in his work. His own hands should be clean. The place vaccinated, which is on the upper outside of the left arm, should be throughly cleansed. A sterile dressing—cheesecloth will do if it is sterile—must be secured in place over the point vaccinated. This had better be held on by surgeon's plaster, in order that it shall not slip off. The child must not touch this with his fingers, lest he introduce germs. Careless handling of the wound has produced many cases of so-called blood poisoning," bringing vaccination into disrepute.

By the way, the New York State department of health has investigated those cases of death reported to be caused by vaccination, and the death certificates of the attending physicians revealed that not one of the deaths was remotely connected with vaccination.

One Failure Through Carelessness

A case is reported of a young boy who had been vaccinated and was wearing a mask over his arm. One day when he was engaged in a game of ball, the mask trouble him, and he laid it on the ground until the game was finished, and then resumed the mask. In the course of a few days, he died of lockjaw due to the tetanus germ introduced from the ground through the mask.

Success with Over Three Million

The story of the cleaning up of the Philippine Islands is an object lesson for all time. It ought to prove conclusively the value of vaccination; for over three million people were vaccinated, without the loss of a life or a limb, and six thousand lives were saved annually from death by smallpox.

Lemons For Consumption

An Easiy Tried and Harmless Suggestion

PUT a dozen whole lemons into cold water and boil until soft (not too soft), roll and squeeze until all the juice is extracted, sweeten the juice enough to be palatable, and drink. Use as many as a dozen a day. Should they cause pain or looseness of the bowels, lessen the quantity, using five or six a day until better; then use a dozen again. By the time you have used five or six dozen, you will begin to gain strength and have an appetite. Of course as you get better you need not use so many.

Follow these directions, says Mrs. Alice Wilson, in *Life and Health* (Washington), and we know you will never regret it if there is any help for you. Only keep it up faithfully. She says further:—

We know of two cases where the patients were given up by physicians, and were in the last stages of consumption, yet both were cured by using lemons according to the above directions. One lady, in particular, was bedridden and very low; she had tried everything money could procure, but all in vain. In February, to please a friend, she was persuaded to use lemons, and in April she weighed one hundred and forty pounds. She is a strong woman to day, and likely to live as long as any one of us.

When people feel the need of an acid, if they would let vinegar alone and use lemons or sour apples, they would feel just as well satisfied and receive no injury.

A suggestion may not be amiss as to a good plan. When lemons are cheap, purchase several dozen, and in the following manner prepare them for use in the warm days of spring and summer, when the acids of lemons and other ripe fruits are so grateful and useful. Press your hand on the lemon and roll it back and forth briskly on the table, to make it squeeze more readily; then press the juice into a bowl or tumbler (never into tin); strain out all the seeds, as they give a bad taste, and can the juice.

The following from another source is worthy of a trial:—

"Lemons have been so expensive this summer that we have learned how to use every one that was bought. If any show signs of moulding or drying up before we are ready to use them, we squeeze out the juice and put it into a dry jellyglass, then pour over it a teaspoonful of olive oil. A small piece of clean cotton cloth absorbs the oil when the juice is required, leaving the latter as fresh and nice as when taken from the lemon. A dried lemon can be made better by a threequarter-hour bath in fresh cold water."

Help or Cure for Catarrh

Diluted lemon juice used to snuff up the nose is very good. Dilute several drops of lemon juice with twice or three times as much warm water, snuff it up one nostril, with the finger closing the other nostril; then close both nostrils, retaining the liquid several minutes, holding the head either tipped backward a little or lowered very low; gently blow out the liquid, and repeat the treatment to the other nostril. Gradually increase the amount of lemon-juice and decrease the amount of water, until, if possible, the pure lemon-juice is used. It is hard to do, but the results are fine. Such heroic treatment three times a day for three weeks, or in more serious cases for three months, I have been told, has cured very bad cases of catarrh. By the use of the above, nose and lips that were red and much swollen soon became normal, and the sense of smell that had almost disappeared returned.

[The above is vouched for, says the editor of the *Healthy Home*, as having been effective in some cases. Probably most people would laugh at it. That was the case with a certain mineral spring which had a great reputation in past years as powerful to relieve disease, particularly rheumatism and skin troubles. When they analysed the water and found it was nothing but common water with no mineral in it the scientific men smiled and talked about the gullibility of the public. Now these same scientific men have found radium in the spring, and its power over disease is partly explained. If I had consumption I would try the lemons.]

When and How to Rest

By Anne Guilbert Mahon

I never rest in the daytime," boasted a busy woman.

Every winter that woman had a "nervous collapse," as she called it, and spent from two weeks to a month confined to her room, absolutely unfit for any kind of work. She rested then, incurring the expense of extra help, nursing, physician's attendance, and druggist's bills. She could not be convinced, that by not working so constantly or so hard she could have saved herself the fit of illness.

How many women of the present day follow a like strenuous mode of living, never allowing themselves a moment's rest or relaxation until they are forced to take it in a sick room?

If sparing fifteen minutes or half an hour each day to rest and recuperate will keep a woman's nerves strong and enable her to continue work without undue fatigue, is she not unwise deliberately to disregard this necessity and go on until she is forced by illness to rest?

There are times when a woman's whole system is crying out for needed rest and relaxation, but she will not heed it. Perhaps she may not feel actual bodily fatigue at first but she is using up more energy than she can afford; and in time the breakdown will come, suddenly it will seem then, but, as the doctor told one woman, "It has been coming on you for months;" and it usually takes months to recover.

There are danger signals before this period

of utter prostration, which every woman who wishes to keep healthy and strong and be able to go no with her work should heed.

When she finds she is speaking irritably and impatiently at the slightest provocation, she should stop and take as long a rest as possible. Continued and uncalled-for irritability shows that the woman is unconsciously battling with weakness, and her nerves are all on edge.

When a woman finds that she is nervously rushing from one task to another, working sometimes out of breath, worried over the mountain of work before her, when everything seems to go wrong and life is nothing but a series of petty annoyances and tribulations, she should call a big halt, and, no matter how much work there is for her to do, she should try to go about it slowly and calmly, breathing deeply and evenly all the while, and, as soon as she can, go off and take a big rest. She should retire early, and should take as many short rests in the day as she can manage.

Neuralgic pain is another signal to warn a woman that she needs rest. One writer on health matters states that she has never known a case of neuralgia which could not be cured by rest alone. Neuralgia is usually a sign of depleted nerve force, and the remedy is—rest.

Depression without due cause is another evidence that, nine times out of ten, one is worn out and has not the energy to conquer either the real trouble or the imagined one. A remedy for an unaccountable fit of the blues is to retire to one's room, lie prone and relax, taking long, deep breaths. This is guaranteed to effect a cure of the worst case of blues, especially if it is followed by brisk exercise in the fresh air, a good walk, or the accomplishment of some useful work.

When a woman feels as if she must "scream" or as if she was "going all to pieces," this is one of the most important of the danger signals; and no matter what duties press, she should drop everything and rest until she is entirely free from these distressful feelings. If she does not heed this warning but goes on working, serious results are likely to follow.

The woman who drops everything, say, for a half hour or so after the noonday meal, and gives herself up to rest, relaxation, and recuperation in a darkened, well-ventilated room, will almost invariably feel fresher and be able to accomplish more work in the afternoon than the one who goes on working without interruption, unrested, unrefreshed, plodding wearily along from the beginning to the end of the day. It is not a waste of time to stop and rest. In reality, it saves time, for one is able to accomplish work so much better and faster when strong and well rested.

If every woman would observe this period of rest after the noonday meal, even if only for ten minutes, there would be less friction in the household, fewer worn-out women dragging themselves through days of labour, fewer cases of nervous prostration, and fewer incurable invalids.

To rest, one must relax. This is not easy at first, especially if one is in a nervous, tense condition, but it can be acquired with a little practice, and will make such a difference in the effect of even a short rest, that it is worth every woman's while to master it.

Lying flat on the bed, in loose clothing, in a darkened, well-ventilated room, one should begin by taking several deep, long breaths, inhaling slowly, retaining for a second, then exhaling as slowly and evenly as possible. This exercise is in itself a wonderful means of relaxation, and will do much to overcome the tense, nervous condition, which is a main cause of nerve exhaustion.

After taking the long breaths, begin with the right hand and arm. Raise the arm slowly at the side, then drop it suddenly, making it as limp as a rag. Take the left hand and arm next, then the legs, then try to make the whole body feel as limp and relaxed as possible. After a short time this can be accomplished, and then one will rest

in a really relaxed way which will afford untold refreshment and strength.

Never should a woman allow her thoughts to dwell on unpleasant subjects, or on any worrying details of work ahead, while she rests. She should guard well her thoughts, trying not to think too strenuously of anything; but if the mind must be occupied, then let her think of all the pleasant things she can—attractive bits of scenery, beautiful pictures, anything which will serve to divert and refresh her.

If a woman takes this period of rest each day, relaxing and allowing herself to rest and recuperate, she will find that it not only fits her for better work during the rest of the day, but that it builds up new strength and actually wards off illness and nervous breakdown. Is it not worth while, then, to "rest in the daytime"?

Short Tempers

EXCCESSIVE monotony in a man's way of living doubtless, says the *Youth's Companion*, tends more than any other circumstance to shorten his temper. To feel that you are going on and on, day after day, and yet that you are not making any real progress—indeed, that instead of getting anywhere you are gradually slipping back,—inclines you to bestow blame freely and fully whenever there is an opening. And in the bosom of your family such an opening is seldom wanting.

Monotony in the ordinary family's way of living is largely attributable, of course, to the slenderness of the ordinary family purse. It bears with greater severity on the woman than on the man. The man has two bases of operation,—his home and his office, or his shop or his farm—but the woman has only one—her home. She does not share in the daily change of scene and fellowship that is her husband's portion. Her work is usually more monotonous and uninteresting than his. It is also of a nature more trying to the nerves. Cooking, sewing, sweeping, cleaning, keeping small children in order, enjoying only intermittent and occasional intercourse with her friends, instead of daily companionship with them, such as is her husband's lot—if the ordinary husband would stop to think about it, he would wonder how his wife manages to keep as serene and sweet-tempered as she does. Still more would he applaud her success in bringing up the children to have good manners and considerate feelings, instead of harsh voices and quarrelsome dispositions, such as characterise the family next door.

Intelligent appreciation by the husband helps wonderfully to mitigate the monotony of the woman's life and to lengthen out her temper. The man who comes home from his day's work silent, preoccupied or glum; who spends his evening with the newspaper, without even condescending to read the headlines aloud, and who confines his table-talk to a few perfunctory inquiries or a complaining discussion of ways and means, may think that he appreciates his wife; but he has no right to reproach her if she grows cross and bad-tempered.

If in any way it can be arranged, husband and wife should take a short vacation away from each other once a year. Such a vacation promotes in each a perception and an appreciation of the other's good qualities, and forgiveness or obliviousness of the other's faults. Husband and wife then return to each other with a new contentment and settle down together to a new happiness.

"ONE of the best things for a healthy, robust man or woman is to visit the room of someone who is shut in with a chronic disease like rheumatism, who is helpless or who is dependent on the care of others with little expectancy of early recovery. Such an experience not only arouses sympathy, but enables them to prize the good health that they possess,"

If Temperance Is Good For the Army, Why Is It Not Good for the Civilian?

THE whole world seems to be waking up to the baleful effects of alcoholic drinks. In the United States there is a measure before Congress to banish drink from the nation. In Russia the Czar has forbidden the sale of alcoholic liquor, and his millions of troops must satisfy their thirst with something more beneficial than intoxicating drinks.

Alcohol has been condemned at the bar of reason as a foe of humanity. After being worshipped as a benefactor of the race for centuries this enemy of humanity has been stripped of its mask, and proved to be a wily, deceitful foe. Much has been written by the medical profession of late years against the use of alcoholic drinks, and the work of temperance reformers has been much assisted by the condemnation of alcohol by these scientific men.

The European war has already shown the advantage of teetotal armies. Steadiness of nerve, accuracy of vision, alertness of the intellectual faculties are an absolute necessity in a modern army; and experience has taught that these necessary qualities are missing in men who are under the influence of drink. Certain misguided people whose sympathies are influenced more by their cravings of appetite than by the exercise of their reasoning faculties, have protested loudly against the decisions of the authorities to supply no drink to the troops as an interference with personal liberty. But if this be true, every regulation of the military authorities is an interference with individual liberty.

Seeing that it can be shown that the health and comfort of the troops are better preserved by the prohibition of drink, it is certainly the duty of the authorities to make the prohibition, and they are to be commended for their thoughtfulness. But if it can be shown that drink is injurious to troops, surely it is self-evident that drink must be also injurious to all other men. And if it is right and proper for the State to prohibit drink for its soldiers, why would it not be equally right and proper for the State to prohibit drink for its citizens?

That drink is injurious to soldiers is so aptly stated in an editorial in the Melbourne *Age* that we take the liberty of re-printing the article:—

"It would be well for those who have been protesting against the abolition of the "wet canteen in connection with the Australian Expeditionary Forces to prelude further agitation with an investigation of the true relation of alcohol to military efficiency. One of the first striking facts to emerge from such an inquiry is that the most experienced army commanders of all civilised countries are unanimous in regarding liquor as a deadly menace to the health and morale of troops engaged in active operations. Elaborate scientific experiments conducted in the field by expert physicians, and spread over a long course of years, have convinced the scientific world that even a moderate indulgence in alcohol unfailingly produces in the average soldier the following effects: (1) It impairs his sight and diminishes his power to see signals. (2) It confuses prompt judgment. (3) It spoils accurate shooting. (4) It hastens fatigue. (6) It lessens resistance to exposure and disease. (6) It increases shock from wounds, and thereby curtails the chances of recovery. On all these points the leading medical authorities of Europe are in close accord. Army leaders are not in a position—not being doctors—to pronounce such detailed judgments; but personal observations of actual experience in athletics and war have brought them into perfect harmony with the experts' general conclusions. With scarce one notable exception, the general officers of Great Britain and France are advocates of total abstention by soldiers in time

of war, and the highest army leaders of Germany have repeatedly expressed similar views. The Kaiser, indeed, not so long ago, publicly declared that the next great war would be won by the most temperate belligerent nation.

"What the army officers of Russia think of alcohol is demonstrated by the Czar's ukase—issued at the outset of the war—positively forbidding any sort of commerce in liquor throughout the entire length and breadth of the vast Muscovite Empire. And this ukase cost Russia a sudden and absolute loss of revenue to the amount of £93,000,000 per annum. At a smaller sacrifice the French Government was moved, at the instance of General Joffre, to forbid the sale of absinthe even before the French armies were pushed back to the Marne. Lord Wolseley, and the late Lord Roberts, spent much of their latter years endeavouring to establish teetotalism in the regular naval and military services of Britain; and Kitchener's final admonition to all British troops going to the front contains an earnest direction rigidly to objure wine. So widespread an agreement to contest the war with armies pledged to temperance constitutes an event of quite phenomenal significance. But the army leaders of the Allies are merely following the teaching of world old military experience and adopting the matured counsel of the greatest soldier that any age has seen. No man, dead or living, saw more of warfare in all its multifarious phases and conditions than Napoleon Bonaparte; nor has any captain ever entered more intimately into the life of the common soldier. The 'Little Corporal' has left many valuable aphorisms to guide the captains of to day, but none more precious than these two: 'It is only a sober army can succeed,' and 'The foe is less to be feared than wine.' As it would be absurd to credit Napoleon with any expert knowledge of the destructive properties of alcohol, it is clear that his opinion was deduced from contrasts and comparisons, and that he learned his lesson from that greatest of all tutors—experience. There still might be room for uncertainty were the conclusions of army leaders to be in conflict with the judgments of science; but where is the room to doubt when we know that the medical profession of the whole world is practically of one mind in declaring that the generals are right?

"It is now accepted as an axiom that troops who abstain from liquor are able to endure worse privations and to work and fight more effectively than troops whose energies are stimulated with the dram. The worst effect of alcohol—from the point of view of the commander—is that it breaks down the natural powers of resistance of the soldier to disease. When the soldier is physically exhausted, worn out with fighting, hunger, and exposure, it might seem to the ignorant a blessed thing to carry to his parched lips a cheering draught from the distillery. But doctor and the general know better. Each in his different way has learned that he had almost better poison the man outright; for it is certain that liquor fed to a soldier thus circumstanced will lead him but an illusory and fleeting sustenance, and that it will render him prone to the attacks of a thousand deadly maladies. Since the war we are now engaged in is first and foremost a struggle of endurance between armed nations, facing each other in entrenched positions, and toiling desperately and almost continuously for mastery, it becomes clear that it is of paramount importance to do nothing to diminish the disease resistant qualities with which nature has endowed our troops. For that reason we must not give them 'wet' canteens when they are in the field; and while they are in training we must teach them to abstain from alcohol, so that, later, they may never feel the need of so mischievous a spur.

"And there is the moral factor to consider. Who will muster hardihood to deny that drink is the mortal enemy of discipline? Search the criminal records of our long

(Concluded on Page 207)

: Mother and Child :

Keeping Young Children Well

CHILDREN do not cry without cause any more than do grown-up people. There is something wrong somewhere when the little folks are cross and fretful, and so instead of scolding and whipping them, "to give them something to cry for," try calmly and intelligently to discover just what is troubling them.

Years ago, before the safety-pin was invented, when a baby cried it was often necessary to undress it to search for the busy little pin which was responsible for many a squall. But to-day the source of trouble is usually just as obvious.

When the little ones are tired and sleepy, they are usually cross, and also when they have been confined to the house for several days. Sometimes they may be hungry or thirsty, and not quite conscious of it, or, what is more likely, a slight touch of indigestion is affecting them. Sometimes too much or too strong soap is used, irritating the skin. Then there is the question of clothing. The child may be too warmly clad, or too cold, or there may be something too tight, or something scratching the tender little body. Children's shoes are often uncomfortable, and frequently their stockings work down, and the wrinkles hurt their tender little feet.

Children are naturally fretful when suffering from mumps, whooping-cough, measles, and children's other diseases, but as this is invariably accompanied by some fever, a loss of appetite and a coated tongue, it is usually recognised as some thing more serious than merely being cross.

Imperfect digestion is quite common among children when they begin to eat solid food. It is often caused by their swallowing their food before it is thoroughly mixed with saliva. Mothers of the uncivilised world in some cases obviate this difficulty by the very simple habit of masticating the food first in their own mouths. Indeed, I have seen this done by women in our own country. This may seem not merely disgusting, but unfair to the child, and especially in the case of an unhealthy mother. However, when you, consider a vigorous, healthy mother, with a mouthful of sound, white teeth, this practice is partly robbed of its unwholesomeness, especially as it insures a child against indigestion. Of course this plan is not recommended, for one can never tell what infection the mouth may contain, but I have mentioned it to show the necessity for a sufficient use of the saliva. As soon as the child has teeth it can easily be taught to masticate its food. Give it a dry crust or a piece of toast now and then at meal time, which it will be obliged to use its teeth upon.

A breast-fed baby is seldom troubled with indigestion, unless fed too much or too often. Bottle-fed babies are not always so fortunate in this respect. Sometimes the stream of milk coming from the bottle is too large, and thus not mixed with saliva. This is easily remedied by procuring a new nipple and making smaller holes in it. Sometimes modified milk should be given, as though for a younger infant.

Eating between meals among older children is another cause of indigestion, for it destroys the appetite, which is undoubtedly the most important factor in digestion. The skin becomes sallow or very flushed, while the tissues grow soft and the teeth decay. Cankers appear in the mouth from time to time, and the bowels are not normal. Many a case of so-called summer complaint, attributed to the heat or to fruit eaten, is the

direct result of irregular or over-feeding.

The symytoms of indigestion as a rule are easily corrected by giving the child plenty of water to drink, particularly warm water, and by giving the stomach a rest. Never encourage a child to eat. It doesn't matter if one or two meals are missed. A warm bath, a little cuddling and a long sleep will do the rest.

Observe some sort of regularity in the feeding, as well as in the matter of sleep and other requirements, and give only wholesome foods. It doesn't need cakes, and is better without them. Don't be afraid of fruits. There is nothing in the world which will avert a bilious attack or a cold so quickly as orange juice for an infant or lemonade for an older child. Be careful not to give starchy food too early, before the salivation is well established. A child of six months is not ready for mashed potatoes, white bread, or corn starch pudding. Do not feed the child with meats nor allow it to taste your tea and coffee. Even cereal coffees and cocoa are mildly stimulating, and may prevent the child from sleeping. There are enough foods which a child may have, suitable for its age, to furnish sufficient variety to insure appetite, without the use of pastries or heavy vegetables. See that the child gets a drink of water often, and that this is either from some good spring or filtered. Never refuse it a drink, no matter if you have to get up in the night to fetch it.

To keep the children healthy and sweet-tempered, they must get plenty of fresh air. They cannot get too much. Try to get out with them at least once each day; let the breakfast dishes stand, and take the little folks out for an hour or two in the fresh, early morning air. It will do you all so much good that you will feel more than repaid for the set-back in your work, while they will sleep longer and tighter for it during their daily naps, and give you a chance to catch up. When the weather is too stormy to venture forth, put the children's wraps on them and throw the windows wide open. Do this also just before the afternoon naps, and you will see the beneficial results. Always when the little ones are asleep and warmly tucked in bed, have all windows wide open, so that every breath will be as pure as if they were outdoors. Even a young baby should have this fresh air, and it will not take cold. Neither will it cause colic. Colic is caused by the pressure of gases in the stomach and intestines, as the result of fermenting foods; while colds are developed from the over-abundance of wastes which the body tries to throw off. So get the child out-of-doors every day, and *especially* if it is ailing.

It is quite the prevailing superstition that one cannot escape the contagious childhood diseases, such as measles, whooping-cough, chicken pox, scarlet fever, diphtheria, mumps, and the like. We are told that we should try to have them while we are young, "get them and have them over with," assuming that every one is bound to contract them sometime, and that they are less dangerous in childhood. Sickness is looked upon as a natural instead of an abnormal condition, and the statement that anyone has never been ill in his whole life is regarded with astonished incredulity.

Any trifling indisposition on the part of the child is often regarded as the fore-runner of a contagious disease. "He is coming down with something," the mother fears, and forthwith the little one is housed, bundled, and drugged until he bids fair to do justice to her fears.

There is perhaps no blame to be attached to anyone, least of all to the hard-working and devoted mother who wears herself out in the service of her family. There is no doubt she does the best she can with the knowledge she has—certainly no one would grieve more than she to know that through her ignorance and misdirected efforts she had done her child more harm than good. But parents must be educated in the care of children.

There is really no reason why a child should ever be sick. I feel perfectly certain that children reared under proper conditions of life would not "catch" these diseases, even if exposed. It is the child with the lowered vitality that is subject to them. Depend upon it that there is something wrong somewhere when the little one gets whooping-cough, measles, scarlet fever, and the like. Doubtless there are disease germs lurking everywhere and in everything, and no one can escape eating them and breathing them at every turn. Our dwelling places are not ideal, and we cannot chemically analyse every morsel of food and every drop of water consumed. We have little or no control over the sanitation of the schools, the condition of the streets or our neighbours' homes, or the health of other children. But if good health is maintained a power of resistance is established that effectually baffles all efforts upon the part of these germs to settle down and make trouble. The body normally has the power to destroy disease germs, but as soon as the system becomes run down, these germs gain a foothold and multiply, and illness is the result.

When a child is in seeming good health, uncertain foods and unfiltered water are consumed without notice, and it is only when the child is actually ill that some sort of attention is paid to it. However, if the special attention was of the right sort, the child might even at the eleventh hour escape a serious illness. But with the usual ignorance in regard to the laws of health and the nature of disease, parents in general are almost certain to do the wrong thing, and then the child is sure to have something. Windows are closed, if by any possible chance they had been open; extra clothes are piled on the little one, and it is coddled and given anything it wants, because it is sick.

At the very first sign of illness, look to the ventilation. You cannot have too much air. This may be accomplished without having a direct draught blowing on the child by opening windows in an adjoining room, and allowing the air to circulate gradually through the doorway. If the time is winter, furnish plenty of heat so that the open windows will not chill the air too much. The cost of burning a little extra fuel, where needed, will not be nearly so great as what is usually spent for doctor's fees.

Allow the child to fast as long as possible, for the system is in no condition to digest and assimilate food. This will not be difficult, as in any illness there is usually no appetite.

If the child is fed regularly, its diet well balanced with plenty of fruit, if the bowels are normal and the youngster bathed often, with lots of fresh air, the mother may consider her little one quite immune from disease.—*Edith M. Bates Williams.*

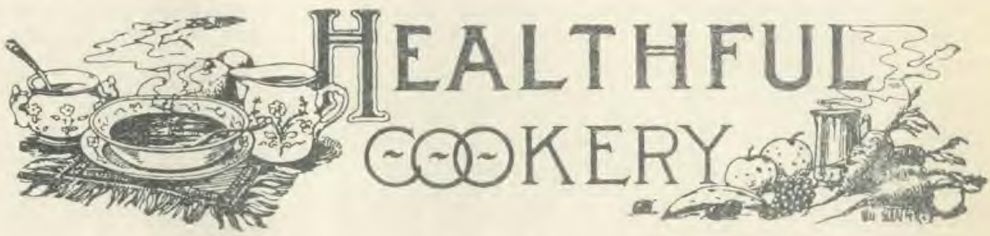
THE CARE OF THE HAIR

THERE are two things that the hair must have in order to preserve its health and beauty: perfect cleanliness and a good circulation of the blood in the scalp. Badly treated or neglected hair is not beautiful; it grows dry, and dull, and brittle, and if the bad treatment continues it may gradually disappear entirely.

Most persons do not begin to tremble for their hair soon enough. They wait until a good deal of it has fallen out, and then they think to set matters right by a few appointments at the hair dresser's and a bottle of tonic. But nothing demands and responds to consistent good treatment more than the hair. It is hard to say just how often you ought to have a shampoo, but be sure it is done often enough to keep both hair and scalp in a condition of absolute cleanliness.

If washing seems to make the hair too dry, rub in a few drops of some bland oil after the shampoo. Do not put the oil directly on the hair, where it cannot possibly do any good, but massage it thoroughly into the scalp with the tips of the fingers. That needs to be done only after a shampoo, in order to restore the natural oil that the washing has removed, but it

is a good plan to massage the scalp with the tips of the fingers every day, both night and morning. That is perhaps the most important single rule for those who would possess fine hair. The massage should be vigorous, but not rough for the purpose is to bring the blood to the surface of the skin and to keep the scalp freely movable on the surface of the skull so that the blood can circulate freely. The free circulation of the blood is the whole secret of the strength, the gloss, and the beauty of the human hair. Careful brushing (with a scrupulously clean brush) is also helpful, for it tends to remove dust, to make the hair more glossy, and to make it amenable to its owner's will.—*Selected.*



Salads

BY GEORGE E. CORNFORTH

THE making of salads gives the cook an opportunity to bring into play her artistic tastes and ability, for salads may be made very attractive to the eye as well as to the taste. The salad has been called the "prince of the menu." The needs of the bodies of those who partake *might* be supplied by putting proper combinations of food on the table as feed is put before horses, and those who eat *might* do so as if they were getting a disagreeable duty done; but we believe that with sufficient study, thought, and care the preparation of food may be a real pleasure, and give the satisfaction which comes with the feeling that we have done something well; and it is capable of demonstration that food which delights us through the eye and the taste is of greater benefit to us than that which is eaten mechanically. I do not know but we might say that to enjoy our food is a duty which we owe ourselves. Therefore we feel that salads may fill an important place on the bill of fare. Moreover, in salads, vegetable oils which have no inconsiderable dietetic value, for the taking of which many feel an aversion, may be so disguised with other most wholesome foods, such as fresh vegetables, that the whole is made a very palatable food combination of real health-giving value, the oil supplying real nourishment, while the other ingredients supply elements of real medicinal value in the form of vegetable acids and salts in combination with pure water. I am inclined to believe that a properly prepared salad of the right kind is a far better medicine than any kind of emulsion of cod-liver oil.

General Suggestions

Vegetables and leaves should be fresh, crisp, and tender. Tough and bruised parts should be removed. Lettuce, celery, parsley, spinach, endive, and dandelion should be washed in cold water, allowed to stand in ice-water till crisp, then drained and put into the refrigerator until serving time, when they should be dried with cheese-cloth if any water remains on them. "It should be remembered that winter greens are raised under glass, and should be treated as any other hothouse plant. Lettuce will be affected by a change of temperature, and wilt just as quickly as delicate flowers." To prepare lettuce for garnishing salads, cut out the tough lower part of the midrib of the leaf. Vegetable salads may be garnished with lettuce, parsley, beets cut in various shapes, olives, tomatoes

cut in different ways, nuts, radishes cut in the shape of tulips, slices of radish, slices of lemon. Fruit salads may be garnished with parsley, lettuce, nuts, sections of orange from which the rind has not been removed, nasturtium leaves and flowers, pansies, sweet peas, or other flowers, and smilax. A pretty way to serve a fruit salad is to put it into a sherbet glass, set the glass on a small paper doily on a salad plate and lay a wreath of smilax around the glass on the plate.

To prepare oranges for salad, peel them as you would peel an apple, removing all the white skin on the outside of the orange. Then by cutting with a sharp knife on each side of the membranes that separate the sections, remove the sections free from membrane, then cut the sections into small pieces. To prepare white grapes for salad, pour boiling water over them, let them stand a few moments, then pour off the water and pour cold water over them. The skin can then be easily peeled off. Remove the seeds also. When apple or banana is used in salad, the dressing should be made first, and the apple or banana cut into it, so it will not turn dark by standing exposed to the air after being cut.

Salads should always be served cold. Green salad plants lose their crispness by standing in the dressing; therefore the dressing should be added to green salads just before serving. Left-over cooked vegetables may be well utilized in salad. With salads of this kind it is well to mix the dressing, and then allow the salad to stand in a cold place for an hour before serving, so that the ingredients may become seasoned with the dressing.

The ingredients of a salad should not be carelessly stirred together, but should be gently "tossed together" with as little handling as possible. "Vinegar is the liquid excrement of a microbe," a product of decomposition; therefore we do not recommend its use. Lemon juice, with whose medicinal qualities all are acquainted, is to be recommended instead. The dish in which the salad is served may be rubbed with a cut onion or with the cut end of a clove or garlic to give a delicate flavour. Some kind of hard bread, like crackers, is usually served with salad.

I do not use olive-oil in making salad dressings. Instead, I use a salad oil which has no flavour, and find that people who think they can not eat salad dressing because the flavour of olive oil is disagreeable to them enjoy my dressing. There are other oils which are almost, if not quite, as valuable as foods as olive-oil, and they are less expensive.

SPECIFIC DIRECTIONS

Mayonnaise Dressing

1 egg yolk
1 cup salad oil
4 tablespoons lemon-juice
¼ tablespoon salt

Have all the ingredients cold. Put the egg yolk into a cold bowl. Beat it with an egg beater till it begins to thicken. Add a drop or two of oil and beat it in, then add a drop or two more and beat it in. Continue beating in the oil in this way, adding a few more drops at a time after the first few additions of oil. When the mixture becomes too thick to beat, thin it with lemon-juice, then beat in oil again. Continue in this way till all the oil is used. Use enough lemon-juice to make the dressing of the desired consistency. Lastly, beat in the salt. If the oil fails to unite with the egg it will be necessary to begin over again, putting another egg yolk into a clean bowl and beat in the oil-and-egg mixture which failed to unite, drop by drop, into the new egg yolk. This dressing will keep two weeks or more in the refrigerator.

French Dressing

1½ tablespoons oil
1½ tablespoons lemon-juice
¼ teaspoon salt

The ingredients of this dressing may vary. More oil than lemon-juice may be used or more lemon-juice than oil. Have the oil and lemon-juice, also the bowl in which the dressing is to be made, very cold. With a fork stir the salt into the oil, then beat the lemon-juice drop by drop into the oil. The oil will turn white, thicken, and become creamy. Pour at once over the salad, and serve. If the dressing is allowed to stand long before using, it will separate. Use only as much of the dressing as the salad will take up, not enough so that any will drain out of the salad into the bottom

of the bowl or on to the plate on which the salad is served.

Boiled Salad Dressing

3 eggs
¼ cup oil
¼ cup lemon-juice
¼ cup water
½ teaspoon celery salt
½ teaspoon salt
1 teaspoon sugar (this may be omitted)

In a double boiler heat all the ingredients except the eggs. Beat the eggs, add to them some of the hot mixture, mix well, then stir the eggs into the hot mixture and cook, stirring, till the mixture is of the consistency of thick cream. Too long cooking will cause the mixture to separate and look rough or curdled.

Nut Salad Dressing

1 round tablespoon peanut butter
½ cup water
¼ teaspoon salt
2 tablespoons lemon-juice
¼ cup thick cream

Rub the nut butter smooth with the water, add the salt, and cook till the mixture thickens. Cool, and add the lemon-juice. Whip the cream, and fold it into the dressing.

The two preceding dressings, also, may be mixed with whipped cream when using.

Tomato Salad Dressing

½ cup tomato-juice
1 tablespoon lemon-juice
½ teaspoon sugar
⅛ teaspoon celery salt
1 tablespoon oil
1 level teaspoon corn-starch
⅛ teaspoon salt

Heat the tomato juice to boiling, and thicken it with the corn-starch, which has been stirred smooth with a little cold water. Add remaining ingredients.

Whipped Cream Dressing

1 tablespoon sugar
2 tablespoons lemon-juice
½ cup thick cream
⅛ teaspoon salt

Mix the lemon-juice, sugar, and salt. Whip the cream, not too stiff, then add to it the mixed lemon-juice, sugar, and salt. Care must be taken not to stir the mixture too much when the acid is added.

With these general directions the reader should be able to make a large variety of salads, but in the next article I shall suggest a few combinations.

If Temperance Is Good For the Army, Why Is It Not Good for the Civilian?

(Concluded from Page 201)

peace, and dispute if any can, that drink maddens; that alcohol is chiefly responsible for our gallows and our gaols. It is more than probable that the most awful outrages attributed to the German armies during their ruthless tramp across Belgium and France were committed by sections of drink-maddened soldiery. 'Innumerable witnesses,' says the *Times*, 'testify that the trail of the German troops is marked by myriads of empty bottles.' The fact, if it be a fact, excuses nothing, but it explains much. The kindest of men become savage under the accursed influence of alcohol; and a victorious army, inflamed by the passions excited during battle, then further bankrupted of reason by indulgence in the cup, may readly be ripened to treat their beaten adversaries with atrocious cruelty. And this is true of every nation and of every time. Fortunately, the Allies have taken care that when they are victors and invaders their triumphant legions will not violate the laws of warfare, incited by the diabolic whisperings of drink mused brains. That the Allies prohibited 'wet' canteens principally for reasons of military efficiency is obvious, but it is simple justice to credit them also with a sensible foresight to preserve their national repute. Let us hope that the local clamour for the 'wet' canteen will promptly disappear. It is a stupid and a recklessly short-sighted agitation. The clear duty of every patriotic citizen is to support the 'dry' canteen, and by every possible means to help our military authorities in their efforts to instil habits of abstinence in our gallant young trainees. One method we may suggest is a tacit agreement among the people to refrain from treating and 'shouting' any of our troops. The practice is neither wise nor kind."

Australian Life and Health.

Diseases and Their Treatment

First-Aid Methods for Every-Day Use

By Minnie Genevieve Morse

Among the modern movements for popular education along scientific lines there is none of greater practical usefulness than the teaching, which is becoming every year more widespread, of what are known as "first-aid" methods of treating injuries. The presence of a person with a little knowledge of how to meet emergencies often does away with the necessity of calling a physician in minor accident cases, and proper treatment immediately upon the occurrence of any injury will, in many instances, prevent a trivial hurt from becoming serious or even dangerous. Mothers, teachers, play-ground directors, and all who have charge of small folk should be acquainted with simple, up-to-date methods of handling every day accident cases. With a little really practical knowledge, ability to keep a cool head in an emergency, and a few simple surgical supplies ready at hand, it is possible to accomplish some surprisingly effective amateur surgery, and not seldom a life has been saved by such means which must otherwise have been lost before a physician could have reached the patient. Nicely boxed household outfits for first aid work may be bought of almost any pharmacist, but it is easy to get together the really needful articles for oneself. For dressings for the cuts and burns and bruises that form so large a proportion of household accidents, there are needed absorbent cotton and sterile gauze, which should be kept carefully in their packages and not exposed to the air, adhesive plaster, and a few rolled bandages of different widths. As the principal necessity in wounds of all kinds is to prevent the entrance of germs, simple antiseptics should be at hands, such as alcohol, listerine, and boric acid. The last-named can be used in the eyes or in the mouth. Hydrogen peroxide is an excellent germicide when fresh, but it deteriorates after being opened. Such dangerous antiseptics as bichloride of mercury (corrosive sublimate) it is better not to keep in the house, and for first aid work they are not needed. Sterile white vaseline is an article that will often prove useful. Baking soda is valuable for burns where the skin is not destroyed. Aromatic Spirits of ammonia is a safe and effective restorative. Mustard is one of the best emetics for use in cases of poisoning.

Wounds

Wounds of one kind or another, scratches, cuts, tears, and punctures of the skin and the tissues lying beneath it, are the accidents most likely to come into the hands of the amateur surgeon. Except where they go deep enough to sever an artery, the principal danger of such injuries is that germs may get into them. Many of the micro organisms that can do the most harm to humanity are about all the time, but as long as the skin remains healthy and unbroken, they are powerless to make their way into the body; when, however, an accident makes an opening through the skin into the tissues, they are ready and eager to swarm in and do their destructive work. The most important thing, then, in treating a wound, is to get it clean, and keep it clean. Simply tying up a cut so as to stop its bleeding is not enough. Even a scratch has been known to make trouble; it should be well washed with a disinfectant at intervals until it has begun to heal over. Cuts with smooth edges usually heal readily when properly cared for; jagged tears take longer, as the healing process is more elaborate, but na

ture's tendency is always towards restoration, and except in severe injuries she needs little assistance beyond protection from the ever present microbe. For washing wounds there is nothing so good as sterile water—water in which germ life has been killed by boiling, but if this is not at hand or cannot be prepared without too much delay, a thorough cleansing with a mild antiseptic will insure safety. The hands should always be well washed before beginning this sort of work, and a bottle of Synol liquid soap, which is itself a disinfectant, is a good thing to keep in the house. In cutting pieces of gauze or absorbent cotton to cover a wound, they should be handled as little as possible, and nothing should be allowed to come into contact with the surface which is to come next to the injury. A dressing for a wound should always extend well beyond its edges. In putting on bandages, they should be so adjusted that they can neither slip out of position nor constrict the part. Bandaging is a rather elaborate art, but the family physician or a trained nurse can teach the amateur the most essential points in a very short time, or a good deal can be learned from a first aid manual.

Wounds of considerable depth may need more than washing and the application of a dressing to arrest the bleeding. Superficial wounds show merely an oozing of blood from the minute blood vessels near the surface; in a deep gash, however, there may be a steady flow of blood from a cut vein, or the blood may come in a series of spurts, corresponding to the beat of the pulse, showing that an artery has been severed. Fortunately this latter sort of thing does not often happen, and when it does a doctor should be summoned as quickly as possible, as injury to an artery of any size, unless properly treated, will result in the patient bleeding to death in a very short time. Even arterial bleeding can very often be controlled, however, by firmly pressing the two sides of the wound together and down, until the clotting of the blood forms a natural impediment to its flow. If one knows the location of the artery which has been cut, a strong pressure with the fingers upon it between the wound and the heart will help to stop the hemorrhage. The procedure so often advised for use in such cases, of tying a bandage, handkerchief, or anything that is handy about a limb above the injury, slipping a stick or something similar underneath, and twisting the latter until the pressure is sufficient to stop the bleeding, is a risky one to continue very long, as it stops the circulation in the whole limb. If it becomes necessary to use it, other means having failed, the constricting band should be loosened after a quarter of an hour or so; it can be tightened again if the flow of blood has not been sufficiently checked.

Burns

Burns may be of any degree of seriousness, but except in the severe forms the treatment needed is very simple. Although they involve injury to the skin, they do not need to be cleansed with antiseptics, as they have been, one might say, sterilised by heat. A soothing application and protection from the air are what is needed. For slight burns dusting thickly with baking soda, or with flour, if the soda is not available, and covering with a sterile dressing or bandage will give relief very quickly. Where the burn has blistered or destroyed the skin, however, an oily application is better than a dry one, as the latter is apt to form crusts by mixing with the discharges, and sterile oil or vaseline answers the purpose excellently. Fresh lard can be used if nothing better is available. Burns caused by strong acids or alkalies, such as may occur as a result of accidents in chemical experimentation, should be washed off quickly to get rid of any traces of the injurious substance which may remain on the skin, then a neutralising substance should be applied. For burns from acids, such as alkalies lime water or a solution of soda are effective; where the burn is due to an alkali, such as strong ammonia, a weak acid is needed.

The burn must afterward be dressed in the same manner as an ordinary one.

Poisoning

Poisoning is fortunately not a frequent accident, but it is a most alarming one, and one in which first aid treatment is absolutely necessary, as much may depend upon what is done for the patient within the first few minutes, and in serious cases to wait for the arrival of a physician might be fatal. Drugs and other poisonous substances should never be kept where children can have access to them; medicine tablets, white or brightly coloured, or with chocolate coating, are liable to be mistaken by very little folks for candy, and there are also children who have a mania for tasting the contents of all the bottles they can lay hands on. Small children have sometimes been poisoned by sucking their toys, the paint on which contained arsenic. Accidental poisoning in older people usually results from mistaking one bottle or one kind of tablets for another, and it is impossible to be too careful in labelling drugs and other supplies, and in reading their labels before using them. Medicine should never be taken in the dark.

There are simple antidotes for many poisons which are easily obtainable, and when one knows what poison has been taken the proper antidote should be given if it is at hand. Emetics are, however, the first thing called for in most cases, to empty the stomach as quickly as possible of the harmful substance, and for this purpose nothing is better than mustard, a tablespoonful to a glass of warm water. If this cannot be obtained quickly, warm salt water may be tried. There are a few forms of poisonlng where emetics should not be given; if a corrosive poison has been taken, which burns the mouth and throat, vomiting would only mean the doing of more damage. Carbolic acid is a poison of this kind. Its most effective antidote has been found to be alcohol; alcohol and water may be given, or whisky or brandy. Strong ammonia is another poison which produces local damage, and where emetics are not desirable; as it is a caustic alkali, the antidote is an acid, and nothing is better than lemon juice or vinegar.

In almost every household there are kept on hand remedies for headache, neuralgia, influenza, etc., which contain one of the coal-tar derivatives, acetanelid, antipyrin, or phenacetin, and these may cause trouble not only when an overdose is taken by mistake, but even in the prescribed dosage, for these drugs are dangerous heart depressants, and in susceptible persons may cause faintness, depression of the whole system, and even collapse. If an overdose has been taken, and the patient is not already too faint and weak for such treatment, an emetic may be given, but the effects of the drug must be combated by stimulants and external heat. Opium, also, is found in many households in one form or another, either as laudanum or paregoric, or in liniments, cough mixtures, etc. In this form of poisoning an emetic should be given, followed by strong hot coffee or tea, and effort should be made to keep the patient from falling asleep. He should not, however, be kept walking, as this adds to the exhaustion of the system; occasional slapping of the skin with a slipper or the back of a brush is a safer method. Rat poison, Paris green, and other preparations of household or garden pests are dangerous articles to keep in the house, and if it is necessary to have them about they should be put up in such a way that they cannot possibly be mistaken for anything else. Most of them contain arsenic. Arsenic may also be taken in the form of Fowler's solution. In poisoning from any preparation containing arsenic an emetic should be given, followed by raw eggs and milk or olive oil. Bichloride of mercury, or corrosive sublimate, used for disinfecting purposes and for killing vermin, is another dangerous article to have about; many fatal cases of poisoning resulting from taking it accidentally have been reported, and pharmacists are now endeav-

ouring to put it up in such a form that there will be no possibility of confusing it with anything else. As in poisoning by arsenic, raw eggs, milk, or flour and water are used in counteracting the irritant effects of the poison. When iodine is taken internally by mistake, starch or flour stirred up in warm water is the proper antidote. Strychnine is one of the drugs most often put up in attractively coloured tablets, and it is much used as a tonic. The best antidote for an overdose is strong green tea. Where combinations of powerful drugs have been taken, or where it is impossible to discover what the poisonous agent has been, all that can be done is to empty the stomach, use stimulants and heat to the body if the patient's vitality is much depressed, and keep him as quiet as possible until the doctor arrives.

(To be concluded)

Physical Culture

Light physical exercises, taken intelligently at proper times, are much better for the development of all parts of the body than heavy gymnastics. The discovery of this important truth has led to the development during recent years of several excellent physical culture systems.

"Slowness, Precision, and Definite Aim"

"Exercises," says Emerson in "Physical Culture," "should be begun gently. The utmost power should be put forth at the middle of the exercises, and the latter part be less strong. One should never start suddenly in exercise. What is the record in regard to animals? How many horses have fallen dead when suddenly started from a walk! Again, how many have fallen dead when suddenly stopped at the height of speed! The same facts are true of men. About two years ago a gentleman started to catch a train; he caught the train, stopped, and dropped dead. It was not the running that killed him; it was not the vigour of the exercise; it was the sudden stopping that killed him. We lay stress upon three directions for exersise, viz., slowness, precision, and definite aim.

In the brief space allotted we can give only a few suggestions on this wonderfully interesting and important subject.

Correct Standing Position

Place the heels together at an angle of about sixty degrees. Carry the weight of the body chiefly upon the balls of the feet. Draw back the hips and abdomen, throw the chest forward, and hold the chin in.

When one has practised correct standing and good carriage for the chest and abdomen until it has become a habit, the breathing capacity of the lungs is enlarged and the vital power of the body increased.

A few simple suggestions may assist those who find it difficult to stand and walk erect:—

1. Raise the chest as high as possible, and hold it there. This effort will throw all other parts of the body naturally into the right position.

2. By thinking of a spot on the top of the head, and trying to lift it, practically the

same result will be secured as from the raising of the chest.

3. If inclined to stoop, stand for a half hour each day with the back straight against a door-casing. Touch the casing with the heels, the back of the head, and all other points of the back possible. Read or study during the time to relieve the monotony.

4. Walk the floor for a half hour each day with a heavy book balanced on the crown of the head. It is difficult to hold the book in place when out of the correct position.

Breathing Exercises

Assume correct standing position,—chest up, shoulders and hips thrown back, and body balanced on balls of feet. Place hands on hips, and inhale slowly and deeply; exhale slowly; relax. This will strengthen and develop the chest and abdominal muscles.

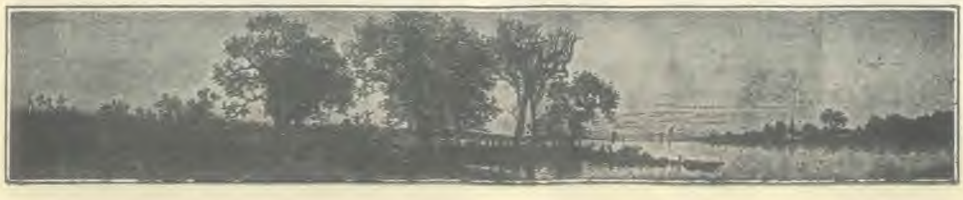
Deep breathing should accompany many of the light physical culture movements. It may also be practised with benefit at all times of day when walking or at work.

"Breathing exercise should be taken each morning upon arising. Breathe deeply, sending the breath down to the waist line. Place the hands at the waist line, and when inhaling force the hands apart. This will fill the bottom of the lungs. The majority of people are said to use the full lung in breathing but seldom. Deep breathing will develop the chest, lungs, and throat, and build up the entire system."

"Pure, fresh air at all times, and plenty of sunlight," says Katherine A. Fenelow M. D. in the *Ladies' Home Journal*, "are essential to gain and to maintain health. The lungs are like a deep well, into which fresh air will not go unless in some way a current is made. We make this current stronger by deep breathing. These lung gymnastics develop and expand the lungs and chest, and increase the circulation of the blood. . . . People do not seem to realize that a lot of poisonous and devitalized air remains constantly in the lungs themselves unless special efforts are made to remove it The result is pale face, sallow skin, weak pulse, cold hands and feet, and sluggish bowels, with an attendant train of enfeebled powers, non-assimilation and lack of energy —all proofs of flagging vitality. These conditions, especially where there is hereditary or acquired predisposition, open the way to possible and probable cosumption. Active exercise, or well-planned breathing movements, remove this vitiated air. Laughing, by increasing the tension in our lungs, arrests the blood flow, and induces the taking of deep inspirations. It brings into play the whole of the lung, and, by increasing their work, is one of the best exercises for developing the chest."

"Breathing through the nostrils with the mouth closed is the only proper way. It is right because breathing is the primary function of the nostrils. Improper breathing is the chief cause of nasal catarrh."

Strengthening the lungs, especially the apexes may be done by blowing through a small pipe-stem, as that will allow the breath to pass out slowly. First fill the lungs with good air, then blow with steady force vigourously but not violently; or inhale a full breath and hold it for a few moments under steady pressure until the apexes of the lungs are filled, which will be indicated by an enlargement of the neck at its junction with the shoulders. A few times daily will be sufficient.—*Home and Health.*



CURRENT COMMENT

TUBERCULOSIS A HOUSE DISEASE

A recent editorial in the *Journal of the A. M. A.*, states that "evidence accumulates daily that tuberculosis is a house infection or family disease, and that the proper way to stamp it out is to remedy the home conditions which predispose to it. That it is preeminently a disease produced by intimate rather than casual contact is shown by recent investigations. The public is gradually overcoming the hysterical fear of tuberculosis that one time made a tuberculosis patient almost an outcast. We are learning that casual contact with a tuberculosis patient is not dangerous.

ALCOHOLICS MAY SAVE MONEY

START a rumshop in your house. Be the only customer. You will have no license to pay. Go to your wife and give her two dollars to buy a gallon of whisky—and remember there are sixty-nine drinks in one gallon. Buy your drinks from no one but your wife, and by the time the first gallon is gone she will have eight dollars to put in the bank, and two dollars to start business again. Should you live ten years and continue to buy booze from her, and then die with snakes in your boots, she will have enough to bury you decently, educate your children, buy a house and lot, marry a decent man, and quit thinking about you.—*Eagle.*

RADIUM AND PUBLICITY

DURING recent months columns in the newspapers have been devoted to the value and efficacy of radium in the treatment of cancer. False hopes have been created, recriminations encouraged, and wasteful expenditures bespoken through the unfortunate publication of ill-advised statements regarding the therapeutic effects of precious radium. . . .

Expectation of cure is arising in the minds of countless patients whose growths have reached such proportions as to make them inoperable. Families are gathering their paltry dollars to pay tribute to the majestic therapeutic touch. The public must be undeceived; the profession must be warmed: radium is not a cancer panacea. For superficial lesions it possesses some value; for deep-seated cancers it appears to be valueless; for large growths, even though superficially located, surgical treatment is of primary importance, and the treatment by radium of secondary importance.

Thus far radium has accomplished little, and what its future is no one knows.—*Medical Review of Reviews.*

SURVIVAL OF BARBAROUS INSTINCTS

Now it is certainly true that there are among our twentieth-century men a good many individuals from whom no help in the upward movement of the race can be expected, and whose fondness for hunting undoubtedly is based upon the survival in them of the paleolithic liking to kill. They prefer to hunt rabbits rather than shoot at a mark, because a target cannot shed blood. . . . It is possible that this sort of man, if he were not allowed to amuse himself by tormenting animals, might react from the humane regime of his time by committing deeds of violence against human beings.—*Article "The Gentleman Sportsman," in the Unpopular Magazine, October-December, 1914.*

ORIGIN OF THE HEALING ART

IT is well known that animals possess strong self-curative instincts. Dogs and cats when indisposed will eat grasses that have a medicinal action, usually of an emetic or purgative nature. The fibrous-rooted wheat grass *Triticum caninum* is frequently eaten by the former. If an animal has been injured, it is noticed continually to lick the affected part, which is a somewhat crude combination of our modern fomentation and massage. Prehistoric man would most certainly have licked his wounds. Later . . . he would observe what animals did and imitate them. Thus the use of hellebore was believed to have been discovered from the goat. Vergil tells us that the dittany was "eaten by wild goats when they were shot with darts." Pliny tells us that bleeding was taught man by the hippopotamus: "That intelligent animal finding himself plethoric, goes out on the banks of the Nile and there searches about for a sharppointed reed, which he runs into a vein in his leg, and having thus got rid of a sufficient amount of blood, closes the wound with clay." [This story, I admit, taxes my

credulity to the limit.—Ed.] Buffaloes, horses, and camels are exceedingly fond of licking salt. Prezevalsky says: "On the Mongolian camels, salt, in whatever form, acts as an aperient, especially if they have been long without it." Livingstone says that "the chimpanzee, soko, or other anthropoid apes will stanch bleeding wounds by means of their finger or of leaves, turf, or grass stuffed into them." Primitive man must have done likewise, only always a little more.—*Scientific American Supplement*, Dec. 5, 1914.

LECTURES ON HYGIENE.

The Transmissible Diseases and the Means of Preventing Them.

The diseases caused by specific germs are all transmissible from the sick to the well.

The transmission of these diseases occurs when the germs which have developed in the sick individual are transferred either directly or indirectly to healthy individuals.

The sick person in most of the transmissible diseases throws off the germs in his secretions and wherever these secretions are carried, healthy individuals may become infected.

Transmission occurs through blood-sucking insects, soiled hands, clothing or polluted water or food. The transmission may also occur through the agency of insects, as flies, mosquitoes, bedbugs, lice, ticks, fleas, etc. The common house-fly carries disease germs by soiling its body while feeding on the infected secretions. Anything that such an infected fly may touch subsequently is likely to become infected, especially milk and other foods.

The blood-sucking insects as mosquitoes, bedbugs, lice, ticks and fleas all carry disease germs by sucking the blood of infected persons and afterward infecting healthy persons that are bitten by them.

The transmissible diseases may be prevented through personal cleanliness and by exercising care in the collection and disposal of the infected excretions of sick persons, and by the isolation of the sick and disinfection of their excretions and clothing.

The purification of water and sewage by the modern biological methods and by the use of disinfectants are valuable measures in the prevention of those transmissible diseases which are commonly distributed in drinking water.

The improved methods of collecting, storing and marketing milk, and the pasteurization of all milk not collected under the most stringent sanitary conditions, are likewise measures that limit the dissemination of the transmissible diseases.

Active warfare against the breeding of all the different carrying insects, as flies, mosquitoes, bedbugs, lice, ticks, and fleas, and the protection of people against these insects serves to limit the dissemination of the diseases that may be carried by insects.

Active immunization, as vaccination, of healthy persons against smallpox, typhoid fever, dysentery, cholera and plague, is probably the most important preventive measure against the dissemination of the transmissible diseases. The immunization of animals with the germs or their poisons for the purpose of preparing the different types of immune serums is also a valuable sanitary measure. The serums are of value in some instances as direct preventatives in that they may be employed in the immunization of those who have been exposed to infection. They are also of value as preventive measures when employed for the treatment of persons suffering from the disease, since they indirectly prevent disease by inducing an early cure and thus cut short the time during which the sick person is dangerous to those around him.

The antitoxic serums prepared for the treatment of diphtheria and tetanus are especially valuable because they have been found to be highly efficacious as preventive and curative agents.—*Dr. D. H. Bergey in old Penn.*

IODINE AN ANTISEPTIC AGENT

Tincture of iodine has found a wonderfully effective use as an application to wounds, both before and after infection. It is known that the commendable success of the Japanese surgeons in the treatment of wounds during the Russian war was owing to the use of the tincture of iodine, both as a preventive and as a cure for infected wounds on the battlefields and in the hospitals.

Not only this, but by painting the skin with this preparation the surface will become thoroughly aseptic in a few minutes, thus obviating the necessity of using other means that require time, and that may be of impossible use on the spur of the moment, or under certain exigencies of the case.

The full-strength tincture is caustic, and should not be used except under certain conditions; but it should be diluted with alcohol, and not water, since the alcoholic solution is the most penetrating and it does not spread so rapidly over the adjoining parts.—*Medical Summary, August*, 1912.

Herald of Health,

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A TEMPERANCE SPECIAL

By an arrangement made with the publishing board which controls this magazine, it has been decided to get out an illustrated Temperance special number of the HERALD OF HEALTH for the October issue of this magazine. In this number of HERALD OF HEALTH special attention will be given to the various phases of the temperance question as it affects India, the Empire, the warring nations of Europe, and the problems that face all nations because of the increased consumption of spirituous liquors and their consequent evils.

Excellent illustrations are already in preparation and others equally forceful are to be provided. There will be cartoons, nature pictures, Indian views and foreign. A special cover design is planned and will be one of the features of the paper.

Special rates for the wide circulation of this issue will be quoted. Look for a more extended announcement in the August and September issues.

SORE THROAT AND MILK

THERE have been a number of epidemics of sore throat of a severe character, with not a few fatalities, which have been traced to milk supplies, in some cases from dairies supposed to be conducted under ideal conditions. In Boston there were fourteen hundred victims in such an epidemic, in Chicago about ten thousand, in Baltimore about one thousand. In these epidemics, a germ of the streptococcus type appeared to be the cause of the disease. The source of the infection was traced variously to milkers, to other persons handling the milk, and to diseased conditions of the cows' udders in some cases.

It is only recently that such epidemics of sore throat confined to the patrons of some particular milk supply have been noted. It is not at all impossible that there have been in the past similar epidemics due to the milk supply, but dismissed with the easy-going diagnosis "grip."

In these epidemics, it would seem that in practically all cases the tonsil is the point of attack. When the disease is transmitted experimentally to animals, it always produces arthritis (inflammation of the joints, or rheumatism), with more or less resulting deformity of the joint.

Whether one enjoys the taste of Pasteurized milk or not, whether one belives it "agrees" as well as raw milk or not, it must be admitted that with the chance of such severe epidemics, easily prevented by Pasteurization, it is the part of prudence to Pasteurize all milk intended for human consumption. Pasteurization prevents the transmission through the milk not only of sore throat, but also of typhoid fever, tuberculosis, and other infectious diseases.

The United States Public Health Service has pronounced unqualifiedly in favour of Pasteurization, and in England, after careful investigation, a commission appointed to report on the subject reported in favour of boiled milk as being superior to raw milk in the feeding of infants. Certainly, to bring milk to the boiling point on the stove interferes very little with its digestibility or nutritive qualities, and destroys most, if not all, of the disease germs present,—*Exchange*.

Heralds of the Morning

By A. O. Tait. A new edition of this popular work, enlarged and thoroughly up to date. It treats on the second coming of Christ, and the signs that the Scriptures tell us should precede that great event. It tells the meaning of the appalling loss of life by murder and suicide, and by fearful calamities on every hand, of the capital and labour troubles, strikes, fires, perplexity among the nations, socially and politically, and the significance of the great phenomena in nature as portrayed all about us. With all this, Christ is presented as the Friend of sinners, and His coming as the cheering hope of His children. It points out the place of refuge for those who would be shielded amid the perils of these last days, and how we may be saved from the great deceptions that Satan is multiplying in the earth. The light from the "sure word of prophecy" is turned on life's pathway, clearing up the obscurity and brightening it up amid the troubles and perplexities, even unto the dawning of the morning of the eternal day when strife shall cease. 419 pages.

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