

Health memoranda for soldiers by Lieutenant Colonel H.K. Allport, RAMC

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Health Memoranda for Soldiers,

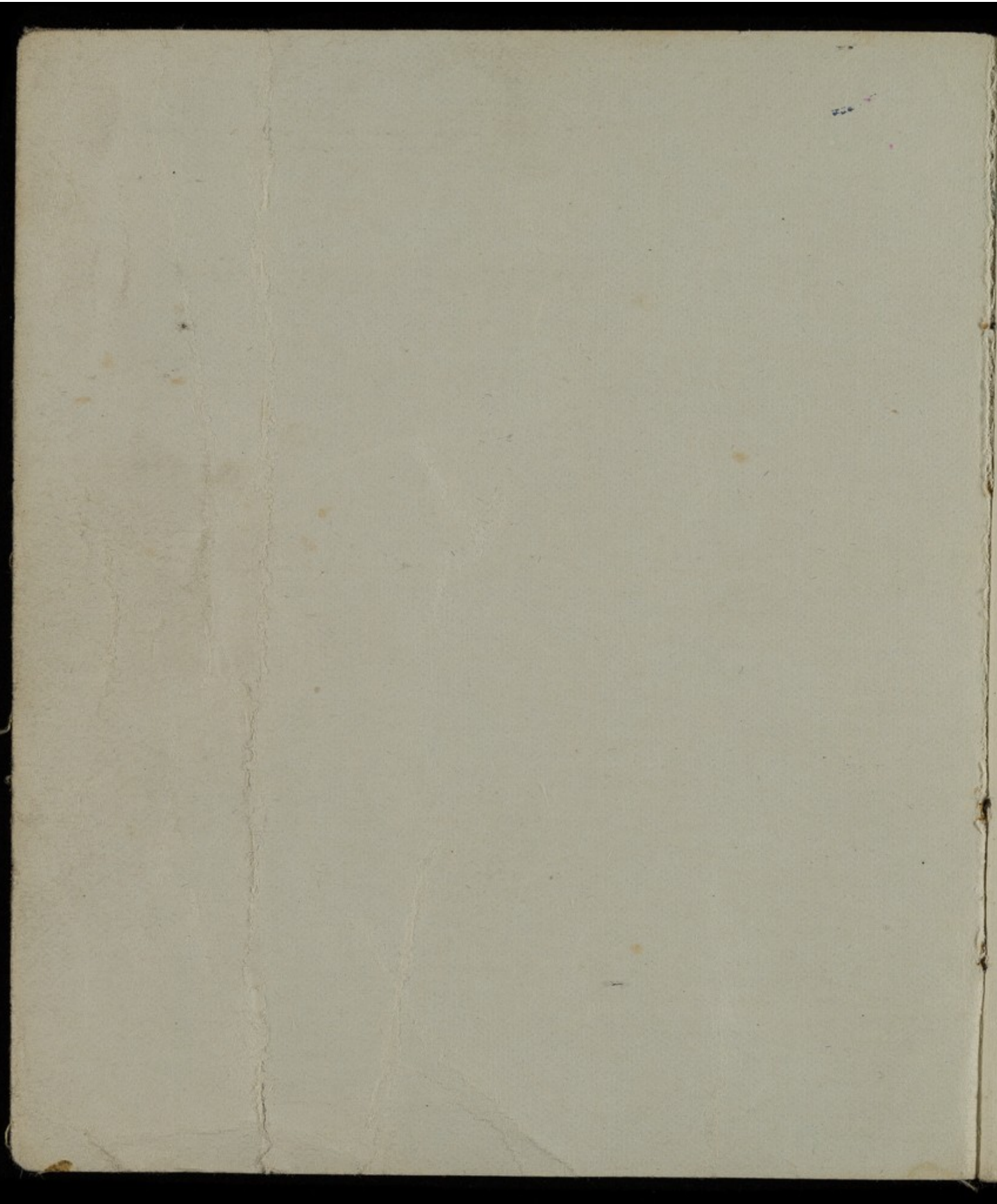
BY

Lieutenant-Colonel H. K. ALLPORT,
ROYAL ARMY MEDICAL CORPS.



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LONDON:
PRINTED AND SOLD FOR HIS MAJESTY'S STATIONERY OFFICE
BY
H. K. ALLPORT & VINEY, LD., 52, LONG ACRE, W.C.



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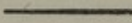
HAZELL, WATSON & VINEY, LD., 52, LONG ACRE, W.C.

1910,

Health Memoranda for

INTRODUCTION.

Soldiers.



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This booklet should be read over and over again, and each individual should constantly bear in mind that, although commanding officers are responsible for the health of those under them, every soldier must also himself look after his own health and do all in his power to preserve it.

These memoranda have been written in the form of a booklet in the hope that they may be of help to individual non-commissioned officers and men, and that they may serve as a text for officers who may desire to instruct men on the art of healthy living in the circumstances of army life.

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HANSELL WATSON & VINEY

1918

HEALTH MEMORANDA FOR SOLDIERS.

Talks to Young Soldiers.

It should be a point of honour with a soldier to be fit and healthy, and able to fight and march with the best. I want to help you to learn how this may be attained. Most of what I tell you is only common knowledge, but it is frequently neglected. I want to teach you the simple art of healthy living. This is carefully followed in the management of domestic animals, such as the horse and dog, but is forgotten in the case of men.

It should be the pride of a soldier to do everything in his power to avoid being sick in hospital; his ambition should be to be at duty in the ranks. It is the especial duty of officers of the Royal Army Medical Corps to prevent sickness. This can only be done with the help of the men themselves, and you should know as much of the subject as may be needful.

Cleanliness.

In old times the teaching of cleanliness was a part of religion, and this is still the case among Eastern peoples. The daily bath is a luxury enjoyed by the well-to-do class.

Dirt does not exist in nature; matter only becomes dirt when it is in the wrong place. Sand on the sea shore is clean and in its proper place, but the same sand in the mechanism of your rifle becomes dirt, and must be removed.

The refuse and waste that accumulate about men and their dwellings is the most dangerous form of dirt, and is the main cause of preventable disease.

Discipline is an aid to cleanliness. If it be relaxed in barracks, there is produced a state similar to that existing in crowded and badly-governed towns. Each man in the depot or regiment is directly interested for his own sake, as well as for that of his comrades, in helping to carry out this kind of discipline, and each should understand the subject clearly. This personal view of the question is especially important for soldiers, and will make the difference between an efficient and an inefficient military force. Experience teaches us that diseases of the class that may be prevented cause more casualties than the hardships or bullets in war.

Personal Cleanliness.

The skin is a covering for protection, and for getting rid of water in the form of sweat. The action of the skin is increased by exercise, as well as by other causes. Sweat is not pure water, but water full of impurities that must be removed. These, when allowed to remain and dry on the surface of the skin, or soak into the clothing, are irritating and unhealthy, besides being offensive. Now this is the key to the whole question of personal cleanliness, and you will thus be able to decide for yourselves what should be done in the matter.

Most men wash their faces and even their hands, but parts covered by clothes are often forgotten. The following should be washed every day when possible:—

1. Between the legs and buttocks.
2. The feet and toes.
3. The arm pits.

This can be done at any time during the day when you have a spare quarter of an hour. It is well to have a small piece of rough towelling which can be wetted in the water and used as a rubber. Sponges are not necessary. As a rule too much soap is used, and all soap should be washed off before rubbing dry.

In addition to this daily washing, a bath once or twice a week is necessary. It is well to avoid bathing for two hours after meals, this especially applies to deep water bathing. The rubbing and grooming that accompany washing and bathing aid in keeping the skin active and healthy, and improve the state of the blood and the circulation. A good groom brushes and hand rubs his horse all over daily, and carefully washes with a wet cloth the mouth, the nostrils, and between the legs. Cleanliness is even more necessary in the case of men, who wear clothes.

Mounted men should pay particular attention to regular washing of the inside of the thighs, in order to prevent blistering from the saddle.

As a general rule water for washing should be neither hot nor cold, lukewarm water is the safest and best. Cold water, however, answers very well, especially if used in a basin with a rough rubber. Cold water used in this way is a tonic and braces one up.

Before leaving the subject of washing, remember to wash your hands *before* eating, and when washing the hands trim and clean the nails. It is a simple matter to acquire the habit of keeping the nails clean and in good order. The finger nails should be cut round, and the toe nails straight across.

The hair must be kept closely cut, and the head should be frequently washed.

Clothing.

Closely connected with the care of the skin is clean clothing. Dirt from the clothes reaches the skin, and dirt and sweat from the skin soak into the clothing. Hence the reason for frequent change and washing of underclothing.

The same clothes should not be worn by day and night. With four shirts it is possible to keep two for night wear. The night shirt is always a stand-by in emergency, such as a wetting. If drawers are worn at night, a pair ought to be kept for the purpose.

Socks get quickly dirty, and the custom of some men is to continue to wear one pair for a week. By this want of arrangement it is impossible to preserve hard, clean feet. Two pairs of socks should be in use, one for the morning and one for evening wear; there should also be two pairs for the wash.

Boots, socks and feet require the most careful attention by everybody, but especially by the soldier, whose usefulness and comfort when marching depends on the state of his feet. The soldier's boots, socks, and feet, should receive as much care as his rifle. The regulation boot is now excellent. It must be kept soft, and kept clean *inside*. The inside should be exposed to the air as much as possible. "Walking out" boots made narrow across the toes should never be worn, as they cramp and spoil the toes. Two pairs of boots ought to be kept in use, and shoes worn whenever opportunity offers.

If wet boots are placed before a fire they will be damaged. It is well to remember, especially on service, that boots can be dried without damage by putting some dried straw or woollen material inside or around them, and then hold them before a fire, but at some distance from it.

In order to soften the leather of the military boot, the boot should be first soaked in water. When the leather has become soft from absorbed water, it should be dried with a cloth, and afterwards smeared with grease, and then placed in the sun or at some distance from a fire.

Underclothes as well as overclothes may be cleaned by shaking, brushing, and exposure to the sun and air. This is nearly always possible even when washing cannot be managed, as on the line of march or in camp, when water may be difficult to get for washing purposes.

Care of the Teeth.

The grinding action of the teeth on hard food helps to keep them clean, but that is not enough; you must use a tooth brush. The tooth brush is an article of a soldier's kit, and

should be used daily for brushing the teeth. A new tooth brush should be soaked in water for some hours before use, to clean it and soften the bristle. To clean the teeth, take a little water into the mouth, wet the brush, then rub the teeth from side to side, not forgetting the back teeth or grinders. When the fronts of the teeth are well brushed, do the backs as well, frequently renewing the water in your mouth. Finally use the brush so as to clean between the teeth. Simple chalk powder assists in the work of cleaning, but a brush and plenty of water are all that is really necessary. The best time to use the tooth brush is before going to bed, so as to remove particles of food after the evening meal. The mouth should be washed out every morning. Decaying or painful teeth ought to be reported to the medical officer.

Many soldiers suffer from spongy, bleeding gums caused by neglect. At first the tooth brush may cause a little inconvenience, but continued use will harden the gums.

Fresh Air.

The air we breathe is, for us, the most important thing in the world; it is "the breath of life." Although we cannot do without it for more than a very few minutes, we forget it, and pollute it, by shutting it out of our houses and rooms. We require it by night as well as by day, and yet many consider "night air" harmful. The importance of fresh air is now well known, but, especially in former years, soldiers often died from disease resulting from breathing impure air over and over again. Barrack rooms were foul, stuffy, and dark. The sluggish air was frequently loaded with impurities from the breath, especially the poison of consumption. Now all this is changed, and your rooms have plenty of light and air. At present there is not much danger to the soldier from impure air during the daytime, but in many barrack rooms the windows are tightly shut at night, and I have seen ventilators stuffed with paper and rags. Fortunately a little air penetrates

through cracks and crannies, and badly fitted doors and windows, which also allow some of the poisonous air to escape. But these dribblets of air are not enough: it is necessary to open the windows. This can be arranged without draught by opening them on one side of the room for about three inches at the top: it is little good opening a window at the bottom. Every man ought to understand the importance of breathing fresh, pure air. If you feel too much air or draught, either in a room, or in a camp or bivouac, wear your woollen cap. The test of good ventilation in a room is simple. There should be no unpleasant smell or stuffiness perceptible to anyone suddenly entering from the outside fresh air. Persons who have been in an impure atmosphere for some time do not notice it, as their sense of smell becomes blunted from breathing the impure air.

Food and Feeding.

This is a subject which interests us all, and most of our enjoyments are associated with it. We commence the day well or ill, as we get a good, or a bad, breakfast, and retire happily or uncomfortably to bed, as we have eaten a well or ill-cooked supper.

The soldier has the care of his food from the time it is handed over by the contractor until he eats it, and if it is not satisfactory the fault is largely his own.

Let me trace out what ought to be done by the store-men, the cooks, and the orderly-men:

1. The hands and clothes of all persons who handle food, or cooking utensils, should be scrupulously clean.
2. The bread and meat stores should be kept scrupulously clean and tidy, well ventilated, and free from flies.
3. The kitchen and all its fittings, such as tables, safes, and shelves, as well as cooking utensils, should be clean.

The cook and his assistants should be particularly clean, and should wear clean washing clothes. Flies should not gain access to the kitchen. They carry minute portions of filth on their feet and contaminate all they touch.

4. The orderly-men should be clean and supplied with a sufficient number of towels for washing up.

The late Mr. Gladstone attributed his vigorous old age to attention to chewing his food, and used to say that every bite should be chewed fifty times before swallowing. Many men eat quickly, and swallow after a few bites, so as to be ready for the next piece, and talk all the time. This brings on indigestion, for which there are many cures (so called), but the secret is prevention, and Mr. Gladstone's way is certainly the best. Chew thoroughly; use your grinders; eat *slowly*.

At present, the soldier's food, including his ration, messing, and extras, is good. In some cases there is a deficiency in vegetables, but the purchase of extra vegetables, fruit or jam, would set that right.

Food is the source of bodily strength, and the more work there is to accomplish, the greater the amount of food required. This is especially the case in war time. A sufficient quantity of food ensures a threefold result: the soldier marches better, he can stand cold better, and he resists disease better. On the other hand, excess in eating and drinking must be avoided.

When the body is fatigued, or hot after exercise, it is better to wait a little before eating or drinking.

Articles of food that smell or are disagreeable to the taste should not be eaten.

Ripe fruit should always be peeled or skinned. Unripe or over-ripe fruit is apt to cause diarrhoea, especially when such diseases as dysentery, enteric fever, or cholera are about, and it should, therefore, be avoided.

What shall we drink?

No desire is so urgent as that to satisfy thirst. If it cannot be gratified it causes terrible suffering; it is the greatest necessity after breathing.

Water is the important and essential part of all our drinks.

In civilized countries the subject has caused much discussion. Controversy regarding it has existed in a more or less acute form from the earliest times. My own view is, the nearer we keep to water the better, but on the other hand *all* alcoholic drinks cannot be shown to be harmful when taken in strict moderation. The danger is excess, and that is easily reached.

Now I will answer the question at the head of this subject.

The best drink is water, cold and pure. If the purity be doubtful it is safest to boil it, and, when possible, make it into weak tea. This should always be done with dangerous water such as you may find abroad when camping or marching.

Aerated waters bottled by reliable manufacturers are generally wholesome.

Coffee is excellent, but difficult to get good, and difficult to make properly. It ought to be weak and mixed with boiling milk.

Cocoa is much used in the present day. Heavy, thick cocoa advertised to contain much nourishment should be avoided. A thin cocoa which mixes readily with water is best.

Lemonade made with fresh lemons, sugar, and boiling water is a very wholesome beverage in summer time, or in hot countries; it should be allowed to cool before being drunk.

These, and some others, are non-alcoholic drinks. I may say that all require to be taken with moderation, even water itself.

All alcoholic drinks are likely, when taken in excess, to do harm to both body and mind. The safest and best within your reach are light ale and porter. In strict moderation, and if you take hard out-of-door exercise, they will not hurt you. It is wise to take them with, or after, meals.

Spirits of any kind are, without doubt, harmful, and are better avoided altogether.

In conclusion, it is a common error to suppose that intoxicating drinks are necessary for healthy men; in most cases men are better without them, and in all cases they ought to be used with caution and never abused.

Smoking.

There are various opinions on this subject. Smoking affects people differently. Some it soothes and pleases, in others causes nervousness, palpitation, and indigestion.

If you have never smoked it is safe to recommend you not to commence. All are agreed that it is harmful for the young, the nervous, and those who are undergoing training.

The chief ill-effects of tobacco are directed against the heart, producing palpitation and irregularity. It also affects the digestion and the sight.

Cheap cigarettes are the worst (and the most popular) form of tobacco. The best thing to smoke is a good clean pipe, with good mild or medium smoking mixture. When smoking you should not spit, as it dries the mouth and interferes with digestion. If smoking does not agree with you, leave it off.

Spitting.

The spittle or saliva is intended to keep the mouth moist and soft; it also assists digestion. Such substances as bread, biscuit, rice, and pastry, require to be well mixed with the saliva in the mouth before swallowing in order that they may be perfectly digested.

By the habit of spitting you waste this useful substance which is necessary in the mouth, but becomes a nuisance and a danger on the floor.

Besides fouling the floors and side paths, it may be the means of carrying infectious disease from sick to healthy persons ; this is the chief way consumption is spread. Other diseases are under suspicion of being spread in this way. Nobody ought to spit on floors, passages, side walks, or in any train, carriage, or steamer, or in any public place, as by so doing dirt is produced where it cannot easily be removed, furniture and clothing get soiled, and diseases of the mouth, throat and lungs are spread.

The Barrack Room.

Where a number of men live together, the greatest good for the greatest number is a safe motto, and this should be the rule in the barrack room. The state of the room you have to live in depends on yourselves individually. If every man is clean and tidy, it is well for the rest, and all benefit alike. Everything should be kept clean, dust and refuse of every kind should be removed, floors, walls, windows, doors, paintwork, cupboards, all should be perfectly clean. The beds and bedding, your clothes, boots, and kit boxes, should always be clean and tidy. The tables and forms should be scrubbed. The windows should be wide open, all day when possible, and the upper sashes open at least three inches at night all the year round.

The same attention should be given to lavatories, urinals, w.c.'s, baths, and the ground round the barracks.

The orderly-man should have *clean towels* and *boiling* water for washing after meals. Cold stale food should not be kept in the cupboards. Bread is best kept in earthenware jars, and not in the kit box with boots and putties.

An article of kit almost always neglected is the hair brush. A hair brush, like other things, requires frequent washing, say every fortnight or three weeks. Do not use soap or hot water, and do not dry it near the fire. The following is the proper way to wash your hair brush:—Put about a teaspoonful of

washing soda into half a basin of cold water, hold the brush in the hand by the back, and wash the bristles by dabbling it up and down near the surface, so as not to wet the back. Shake out the water briskly by swinging, and place it to dry in the air or wind, *not* in the sun or near a fire. It is advisable to finish the washing by rinsing in plain water before drying.

The Question of Chastity.

For your own sakes be chaste, in order to avoid the risks of disease spread by infected persons.

Self-control in this respect may seem to you out of harmony with your nature, but for all that it must be practised.

Syphilis causes the greatest amount of suffering and disease ; it shortens life and renders old age miserable, even if those who are afflicted with it ever reach it.

When once a man's constitution is infected by this poison, it appears again and again in many forms, all through life, and is transmitted with all its attendant misery to his children.

A soldier who has contracted this disease is not fit to go on active service, and regiments have had to be kept back from going to the front on this account.

Service Abroad.

This usually means India, or some other tropical station. There you find a great deal of your present routine life, but the climate will be different, it will be much hotter, and you should be prepared to make some changes to suit these new conditions. By following carefully the rules already laid down, with even stricter attention to cleanliness, moderation, and temperance, you cannot go far wrong.

Heat by itself is not dangerous to health, and with care and commonsense ought not to affect your comfort.

The chief dangers to be avoided are disorders of digestion and fevers.

The principal fevers are:—(1) Sun fever, (2) malarial fevers or “fever and ague,” and (3) enteric fever.

Sun stroke and sun fever may be avoided by protection to the head, neck, and spine. Do not cross the square to the bath with only a thin towel on your head, or uncover your head in the excitement of games. It is necessary to always wear a well-fitting, properly ventilated helmet or topee, covering the head, temples, and neck. The spine should be protected by a flannel shirt and a loose khaki jacket, the waistcoat of air round the body is a valuable protection. The early morning sun, although not so hot as at mid-day, is quite as dangerous, and the level rays strike below the rim of a badly fitted helmet on to the temples and forehead.

A further preventive of heat or sun fever, is a clean skin and a clean shirt, which should always be flannel. Again, do not expose yourself to the sun with an empty stomach. Never, if you can help it, leave barracks without a cup of tea, coffee, or cocoa, and bread or biscuit, in the early morning. This precaution would go far to prevent illness.

Malarial fevers are caused by the bite of an infected mosquito. These particular mosquitoes bite during the night, about sunrise and sunset. Keep your feet and hands under the sheet, if possible, or better still get mosquito curtains. Mosquitoes breed by depositing their eggs in small pools, or in fire buckets, or other vessels containing water that remains undisturbed. All such collections of water about, or near, barracks ought to be removed. Every man should assist medical and other officers in endeavouring to get rid of mosquitoes, and prevent them from breeding about barracks and cantonments.

ENTERIC FEVER.—This is a fever of dirt, and the infection may be swallowed with the food or drink, or as dust carried by the air. Now the best precaution against this disease is cleanliness; clean air, clean water, clean milk, clean food and cooking, clean hands, especially when eating, clean cooking and eating utensils, clean rooms, clean latrines, clean

barracks, and clean surroundings generally. Flies carry the infection, and all collections of waste that encourage them should be promptly removed.

Disorders of digestion may be avoided, and the following rules will help you:—

1. Never, if you can help it, leave barracks without an early morning meal. I recommend cocoa and a biscuit or bread, but coffee or tea are equally useful, or even boiled water with or without milk. *Never buy milk out of a milk can*, and, if possible, avoid it altogether, for of all drinks it is the most likely to be infected.
2. Avoid constipation (*i.e.*, being bound in your inside). This is mostly due to improper feeding or eating too quickly. The fault of the soldier's ration is, relatively, too much meat and white bread, not enough of fruit, vegetables, fat, and something to counter-balance the over refined white bread, like oatmeal. The ration of meat is quite sufficient and you do not require any more. Some men spend money on extra meat in the form of pork, hot curries, fried eggs. If you wish to spend money to supplement your ration put it into extra vegetables and fruit, or jam, oatmeal porridge, and butter. These extras will make up a very good diet.
3. Avoid medicines, especially powerful purgatives. They ruin your inside; get proper medicine from a medical officer.
4. Protect the belly from chill by wearing a light well-fitting flannel belt, *especially at night time*. A common source of illness in hot countries is chill. Cold is a greater danger than heat. A flannel shirt should be always worn and changed when wet. It is dirty and unhealthy to continue wearing one shirt day and night for a week, which must become soaked with stale and irritating perspiration.

Food and drink require great care in cooking and keeping. Dirt and other sources of contamination are everywhere. (Much is left in the hands of natives without proper supervision.) You

can all help to look after your own interests if you will; it is each man's particular business. No food ought to be kept and eaten cold, as it quickly develops poisons. If it is absolutely necessary to keep cooked food always try to cover it with something, such as a clean plate, etc.

In most military stations the drinking water is carefully selected and may be considered *beyond suspicion*, but on the line of march, or when on shooting pass, or in camp, water is frequently of doubtful quality. In such cases it should be boiled before being used, and it is better to make it into weak tea. Sufficient weak tea should be made for present use, and some over to drink cold.

To make tea properly, place a teaspoonful of tea in a clean warm vessel for each pint required. Add freshly boiling water over it, allow it to stand for three or four minutes, not longer, pour off.

Marching.

On the day before a march, clothing, socks and boots should be examined and repaired if required, and for the first few days' march socks should be soaped inside. Before marching the body should be cleansed. Food and drink in moderation, and as much sleep as possible should be taken.

The water bottle should be filled with boiled or filtered water or with tea.

Only use the water or tea in your bottles. Drink sparingly, as the more you drink the thirstier you become. Never take a large quantity of water at one draught when the body is overheated, as bad effects may result. Instead of drinking a large quantity at once, first moisten the lips and mouth, and then drink small quantities at a time.

A stooping position should be avoided in marching. Avoid speaking or smoking while going uphill or marching against a wind. Do not leave the ranks except for necessary purposes, as even a short run to catch up your company adds to the fatigue of the march.

Never lie on damp ground when it can be possibly avoided, but select dry ground, or collect straw, hay, or branches of trees, and lie on these.

On halting for the day the first thing to do is to examine the feet. Blisters should be pricked, and inflamed feet should be bathed and powdered if possible. It is a good plan to rub the feet with salt and alum dissolved in warm water. In severe footsoreness the advice of the medical officer should be at once sought.

When the halt is made, socks must be examined and flattened out if they are wrinkled. It is a good plan to put the left foot sock on the right foot and the right sock on the left foot. If they are saturated with perspiration put on a clean pair if possible.

Wash the face, neck, feet and hands, or wipe them with a wet cloth wrung dry. This will help to remove fatigue after the march.

Active Service.

On active service the health and comfort of troops are even more important than during times of peace.

The chief danger is not from the enemy, but from disease bred in one's own camp.

The hints given in the section under service abroad apply with greater force to the conditions of active service and everyone should understand the importance of helping to look after his own health and sanitation. [Everything that depresses the mind or weakens the body must be avoided.

The great danger to an army in the field is bad sanitary arrangements.

The most serious diseases that arise from sanitary neglect are enteric fever and dysentery, these spread from infected water and neglected dirty latrines.

WATER.—Soldiers should train themselves to drink in great moderation when undergoing exertion. Drinking requires thought. Men rush at water and drink more than is necessary. Great restraint should be taught and practised even in drinking

good water ; it should be remembered that very little is required during a march, especially early in the day, just enough to moisten the mouth and a little to swallow will be sufficient. The more you drink the fuller you feel, the more you will want, and the more you will sweat. Your bottleful of good water or of cold weak tea should carry you through the day's march. A trainer or sportsman will tell you the same.

Only use water that has been passed as good.

If you must drink bad water boil it before using, or still better, make it into weak tea, without milk ; it can then be drunk hot or cold.

Remember that enteric fever, cholera, and other diseases are spread by drinking water infected with the germs of the disease.

LATRINES.—These are the factories where the poisons of enteric fever and dysentery are manufactured. The infection soaks into, or is washed into the water supply, or dries and is blown about as dust, or it may be conveyed by flies.

[This was known in very early times, and rules were framed to prevent disease from spreading in camps. Moses, an able leader and sanitary officer, who received his training in Egypt, ordered that each man should carry a small spade on the hilt of his spear, so as to dig and cover up when he went abroad to ease himself, and this is still the best way of managing ; everything passed should be covered up *at once*.]

The following rules are taken from "Combined Training," and are a guide of what should be done to prevent disease :—

1. Commanders will see that the ground allotted to them is kept scrupulously clean.
2. On arrival at a camping ground and before the troops are dismissed, the following arrangements will be explained to the men :—
 1. Watering places for men and horses.
 2. Bathing and washing places.
 3. Position of kitchens.
 4. Position of latrines.
 5. Position of refuse pits.

3. Pending the construction of latrines, temporary trenches must be at once prepared to prevent soil pollution.
4. Every officer is responsible that all orders affecting the health of an army, especially those relating to water, are carried out. Neglect of sanitary precautions results in loss of life and efficiency, and it is the duty of every soldier, both in his own interest and in that of his comrades, to pay the most careful attention to such instructions.
5. Troops should not march on empty stomachs.
6. Men must be prevented from drinking water that is not pure. They should be trained to economise the contents of their water bottles, which, before marching, should be filled with weak tea, coffee, or pure water. Early resort to the water bottle only increases thirst.
7. *Boil* any water of doubtful purity.
8. Vessels containing drinking water should be kept covered.
9. Milk is frequently contaminated, and should be *boiled* before use.
10. Latrine trenches must be narrow and deep to prevent the contents being blown about. The contents should be covered with earth several times during the day. Every man should remember to add a covering of earth after using the latrine.
11. Urine may spread infection. Men are on no account to urinate elsewhere than in the latrine trenches, or in urinals or pits set apart for the purpose.
12. Latrines, urinals, refuse pits, cattle lines, etc., must be as far as possible from the water supply and kitchen, and to the leeward side. They must never be placed in or near gullies which discharge into the water supply after rain.
13. Flies carry disease. Food should be protected from them. These insects frequent latrines and refuse pits and horse lines. They breed and multiply in filth. They may be prevented to some extent by keeping all sites, especially

horse lines, scrupulously clean, and using earth freely in latrines and burning all refuse.

14. All refuse and litter should be burnt, buried, or removed far from troops.
15. Camps should be thoroughly cleaned when troops leave, all refuse burnt, latrines filled in, *and the sites marked.*

In addition to these rules personal cleanliness should be strictly observed. Hair kept short. If water cannot be obtained for washing, the skin may be cleaned by rubbing and exposure to the sun and air. Clothing, especially underclothing, should be removed when possible and well shaken, turned inside out, and exposed to the sun and air. Feet and socks require careful management, especially in marching units. Teeth must be kept clean and gums hard and healthy, by brushing. Parts liable to chafe or develop boils should be washed as often as possible, this applies to between the legs and the buttocks.

Chill is a frequent cause of sickness. In cold climates it may set up diseases of the throat and lungs, and in hot climates it may induce diarrhoea and other conditions of the bowels.

Men should be careful to cover themselves, or seek shelter from the wind, if possible, after active exercise.

At night it is very important to protect the belly by extra covering, anything will do if no blankets are available, a belt, an old bag, some straw, or a puttie.

I have tried to show that health may be maintained and even improved by every soldier, and it is not asking any great sacrifice of men to cultivate the simple habits that will contribute to preserving their health. This should be a point of honour among soldiers. You are proud of your regiment, and you should endeavour to add to its efficiency by each striving to attain the highest degree of health and fitness. This art can be learned, it is indeed comprised within a few simple rules: the watchwords are *Cleanliness, Moderation, Pure Air, Self-Control.*

