

# Health

*A Journal Devoted to  
Healthful Living*

**Edited By Dr. U. Rama Rau & U. Krishna Rau, M.B.B.S.**

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**Editorial—**

## Health Education in Ancient India

WHAT is meant by education? Education is defined in the Oxford Dictionary as 'bringing up (of the young); systematic instruction; development of character or mental powers'. In bringing up or rearing the young, you must see that you give such systematic instruction that the recipient thereof improves not only morally and mentally, which is implied in the last synonym for education given in the Dictionary, but also physically and spiritually. Thus, the true significance of education is that which provides for the mental, moral, physical and spiritual development of the young. In India, in ancient days, we find all these four items were included in the term 'Education'. We find also that physical education which includes health education was given priority over other kinds of education. According to the Hindu Scriptures, purity of body and purity of mind are the sure pathways to Godhead. The Latin proverb 'Mens Sana in Corpore Sano'—A healthy mind in a healthy body' approaches the Hindu ideal. The first essential in any educational programme, therefore, ought to be to improve the health of the students, by providing them with healthy environments and compelling them to practise health regulations. In those days, in our country, there were more teachers than the taught and the schools were the teachers' ashrams themselves, remote from public view and free from insanitary surroundings. The students' health habits were moulded under the teachers' personal guidance and supervision, not as in the present day, by teaching a

number of books, and testing their fitness or otherwise after a written examination on the subjects. Let us examine some of the health practices that were enjoined on students in ancient days in India and compare them with modern scientific principles.



*Kashmere Pandit Villagers.*

(i) "Having gathered those alms as much as he wants, having informed his guru (of it) without deceit, let him eat it after rinsing his mouth (sitting) facing the east (and) pure"—Manu Lec. II. 51.

(Here the student is expected to beg alms (of his mother, his sister, or the own sister of his mother or, of a female who will not insult him) and only as much as he wants, thereby teaching him Self-help, Truth and Thrift. Then he must not deceive his guru by telling him a lie, thus, his character, is built. Before eating, he will have to rinse his mouth, which is a wholesome hygienic principle which is seldom observed by modern students who go straight to the table for their dinner, lunch or supper without even changing their dress, washing their hands, face and feet, much less rinsing their mouths. Sitting is the best posture for eating, and this posture is

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conducive to long life. East is a safe position, for the sun's rays in the morning directly fall on him and the food he eats, thereby purifying his body and his food. Lastly, he must eat the food with the mind pure.)

(ii) "Let a (student) Brahman, always eat his food after having rinsed his mouth and in a collected state of mind; having eaten, let him thoroughly rinse his mouth and sprinkle with water the hollow parts i.e. eyes, ears, nostrils, mouth etc."—M.L. II, 53.

(Rinsing the mouth after taking food is here insisted on to avoid oral sepsis and the like. Sprinkling with water the hollow parts is intended to cleanse these parts every time food is taken, for food particles may have unwittingly got into them.)

(iii) "Let him not give the leavings to anyone and let him also not eat between (times), let him not eat to excess and let him not go anywhere with a morsel in his mouth".—M.L. II, 56.

(iv) 'Over-eating is as unwholesome, prejudicial to long life and to attainment of heaven; it is vicious and detested by people; let him therefore avoid it'.—M. L. II, 57.

(The above are self-evident and need no comment.)

(v) "Let a wise man, like a driver of horses, exert diligence in restraint of his senses straying among seductive sensual objects".—M. L. II, 88.

(Here continence is preached and forced upon).

(vi) "That man, who, having heard and touched, seen and eaten and smelled, neither rejoices nor ever is sad, he is to be known as a man,

who has conquered his senses."—  
M. L. II 98.

(vii) "But among all the senses, if one sense fails, by that his wisdom fails, as water (runs out) by one hole from a leather bag."—M. L. II 99.

(A student from the very beginning is taught to control his senses, so that he may not stumble in adult age. But now-a-days contraceptive measures are taught and openly preached to students, thus permitting them and providing them with a means to go astray with impunity.)

(viii) "One should salute first him from whom one gets secular, vedic and also transcendental knowledge."—  
M. L. II, 117.

(ix) "Better a well behaved Brahman (student), who knows only the gayatri, than one ill-behaved, who eats all kinds of food, sells all (kinds of articles) though he knows the three Vedas"—  
M. L. II, 118.

(x) "One should not sit down on a bed or couch on being approached by a superior or one sitting on a bed or couch should arise and salute him".—  
M. L. II, 119.

(Here discipline and respect to superiors are taught)

(xi) "Way is to be made for one in a carriage, one in his tenth (decade), a sick person, one carrying a load, a woman, also for the king and a student who has returned home and for a bridegroom.—M. L. II, 138.

(This is conducive to formation of character, discipline, and reverence to the aged, the sick and the suffering, to labourers and womenfolk, obedience

and loyalty to king and respect to old students and bridegrooms).

(xii) "Being bathed (for cleanliness and not for pleasure, according to Gout, one of the commentators) and pure let him ever make libation of water to the gods, seers and manes, also (let him do) worship of the gods and collecting of fuel".—M. L. II, 177.

(Here instruction in personal hygiene and spiritualism is given.)

(xiii) "Let him sleep by himself always; let him never spill his seed; for one who voluntarily spills (his) seed destroys his vow".—M. L. II, 180.

(xiv) "A twice-born student having involuntarily spilt (his seed) in sleep, having bathed and having worshipped the sun should thrice mutter the text "Again to me" (may strength return)".—M. L. II, 181.

(Here masturbation is prohibited and involuntary emissions are sought to be overcome by prayer and the like. What we now fight shy to teach, our ancients have taught.)

(xv) "For one caught asleep by the sun arising or setting, if he does not penance, incurs great sin —M. L. II, 221.

(This is in accordance with the maxim 'Early to rise.....brings on health.')

The above indicate the lines on which health education was imparted in ancient days. We shall in the next issue examine the defects in the present system of education and suggest measures for their rectification.

# The Civic Sense

By Dr. Parmanand Ahuja, M. B. & B. S.,  
Karachi.

'Man is by nature a civic animal'—*Aristotle*

STANDARD of sanitation and civic health in many Indian cities, otherwise on the progressive scale, leaves much to be desired. Though the wheel of progress has rolled in rapid strides in many advanced cities on the surface of the globe, it has moved at a snail's pace in many large towns in India. A comparative, critical survey of the situation will reveal a sorry state of things. There are the same old type of buildings jumbled up together leaving narrow alleys or lanes between and shutting out air and light. It is the same centuries-old pavement in bazars or streets with 'hills and valleys' which greets the feet of the visitor and in rare lucky cases, spares him with unstrained or unsprained ankles or feet. The same time-worn open drains in the middle of the streets and 'mohalla' lanes refresh the new comer with their eternal stench which sticks to the nostrils and is reluctant to part company; this is particularly 'inviting' when their depths have been recently stirred up by the brush of the cleaner. The open latrine and urinals in or outside 'mohalla' lanes; the heaps of night soil and house refuse, the shoulder-baskets, the open bullock 'palanquins' loaded with the same, wending their way at all hours of the day, all emit 'fragrance and flavour' to delight the visitor day in and day out. The hospitable windows and house sills shower gratuitous presents in the shape of house sweepings and washings, rags

smearred with babies' chits etc., and what not on the head of the unwary passerby. The proud dust on roads, intolerent to be trodden under feet, rises in rebellious storm and triumphantly settles on the head and face of the wayfarer and teaches him an object lesson in self-respect. The grateful flies foretaste all eatables that grace the shop pans of a Halwai, fruit and vegetable seller, grocer, hawkers etc., and hail the visitor with their buzzing music born of an appeased appetite at every turn or corner. Their keen sense of 'equality and fraternity' makes no distinction in time or space to visit a dung heap or Halwai ka Pera. The latter may find a convenient place in the mouth of the passerby soon after visitation from the august winged creature.

Diseases like Tuberculosis, Malaria etc., claim a heavy toll of life, the former alone being responsible for as many as 400,000 deaths annually. Present death rate in India according to the last Census is 24.9 per 1000 and is the highest in the world. Expectation of life is 20.91 years as compared with 55.62 obtaining in England. Infants' mortality rate stands at the formidable figure of 179 per 1000 as compared with 66 in England and Wales and 22 in New Zealand and 132 in Japan.

Some or all of these 'characteristics' are observable in large cities and towns with congested areas and crowded thoroughfares.

### People and Civic Authority

The primary and principal parties which share between themselves the responsibility for the maintenance and betterment of health and sanitation of any city are the people and local health and civic authorities. There are certain items like up-keep of roads and streets, proper delineation of buildings, adequate drainage, proper water and food supply, disposal of night soil, prevention and protection against epidemic diseases etc. which come exclusively under the domain of local authorities. There are others like sanitation of private dwellings, proper conservancy arrangements, disposal of house refuse, washings etc., personal and social hygiene which are mainly associated with the habits and living of the people themselves. But there is no sharp line of demarcation between the people on the one hand and the local authorities on the other, which can be productive of greatest good of the greatest number.

The writer is not unaware of some of the difficulties and disabilities that some Indian cities inhabited by one of the poorest section of the population have to face in the uphill task of progress. It is also undeniably true that many of these urban areas have sprung up in a perfunctory fashion without any care for proper planning of residential or other quarters, lanes, streets etc., or in accordance with any accepted code of sanitary obligations. But much improvement can be effected even under the existing order of things by cultivating what may be called a true civic sense. More than

money, is the imbibing, inculcating and fostering a high sense of civic duty alike among the people, the local authority and the representatives chosen to guide the destinies of the civic bodies. It may not be possible to achieve anything spectacular in a short time. But if a beginning is made in right earnest, something appreciable is sure to be achieved within a measurable distance of time.

### Personal and Public Civic Duties

The people can make a beginning at home by careful attention to personal cleanliness and house neat-



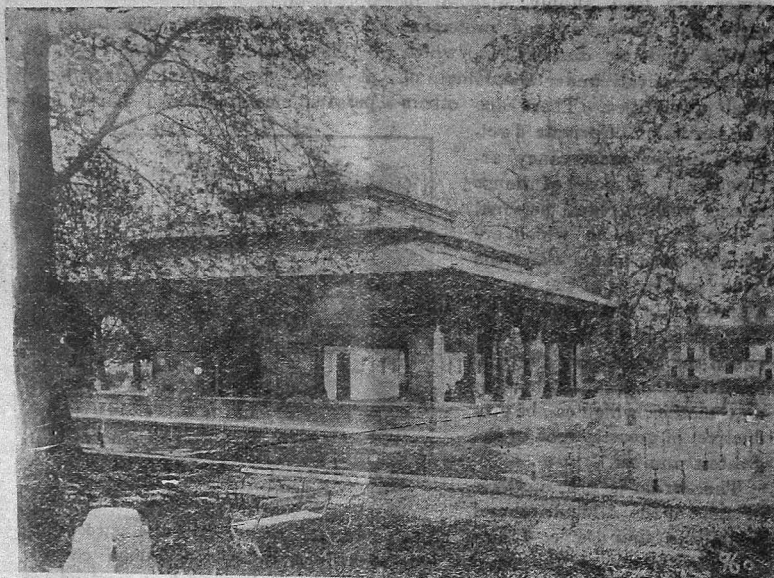
UNHEALTHY BACK-YARD HOUSE REFUSE.  
COW-DUNG HEAP.

ness: to collect all the sweepings, washings, dirt etc. in small covered cans or little dust-bins, instead of throwing them out of the window at the door of the neighbour: to avoid careless spitting on the floor, walls, window panes etc., to see to the speedy removal of the night soil; to wear clean cloths, may be home-washed; to cleanse the cob-webs, dust etc., from the doors, window creeks and corners; to train children in proper, hygienic habits; to discountenance the street latrine or urinal by children or even adults; to be as scrupulous about one's

neighbour as one is about one's self, to have simple nutritious diet and lead wholesome social life; all these and many more, too numerous to mention are little inexpensive 'acts of healthy and hygienic living which will go a long way to improve the standard of sanitation and health.

The cultivation of civic sense of a

the present drainage systems; adequate use, without pilfering, of up-to-date disinfectant and deodorising agents; quick disposal of night soil, house rubbish etc., in properly covered carts or cans; destruction of fly or mosquito breeding spots, disallowing the parade of eatables, sweets, meats etc., without proper wire-netting to



*Shalimar (Govt.) Garden and Fountains Built by Emperor Shah Jahan*

high order in those at the helm of affairs in the local civic institutions is quo-pro quid of achieving the desired objective. The proper metalling and watering of roads and timely repair of even the existing pavements within the town, gradual replacing bit by bit with better and modern methods as funds become available; more vigilant supervision by honest staff, of even

keep off flies etc., pure water and food provision, prophylactic measures against diseases; uncompromising enforcement of the provisions of the Municipal Building, food, drugs, obnoxious trades, public nuisances, etc., laws and bye-laws; these are some of the directions in which local health and civic authorities imbued with honest civic conscience can provide

amenities for the well-being of the rate-payers without much extra strain on public purse. They should be at pains to educate public opinion and carry on unsparing campaign of street lectures, demonstrations, magic lantern shows, house to house visit by health visitors etc., to awaken civic consciousness among the people and bring home to them the advantages of an enlightened civic existence to the great good and gain of all concerned. It is regrettable to note that even the new buildings on the outskirts of many towns and newly developing quarters in progressive cities are being built in a haphazard manner without any attention to proper alignment or well thought-out town planning scheme much less with a view to essential sanitary requirements.

#### City Greater than Community

Lastly, a word to the representatives of the people on the local bodies. They are as much in need of evolving a civic sense in civic affairs as those they represent. They are called upon to safeguard and promote the health and happiness of the citizens and they can discharge their duty and responsibility efficiently only if they work as a team in a common bond of citizenship rising above all sectarian and secular considerations. Many of the local bodies, it is unfortunate to observe, have become the cockpits of

annual bickerings and unseemly squabbles and civic interests are sacrificed at the altar of personal or party ends. City should be greater than any community or caste. They serve the community best who serve the city best.

#### Civic Sense in Childhood

It is often difficult to change the habits of a life time and specially so in those with fossilized minds who shut themselves up in water-tight compartments without any inlet for fresh air or new light. The beginning of civic sense can well be laid in the most impressionable, plastic period of childhood. Children are the future citizens of the town. The teacher at school and parents at home with some knowledge of the elementary laws of personal and public health and civic matters can mould the habits of little children and instruct them in wholesome ways of individual and social life. The seed of sound civic sense sown in the virgin soil at this stage of life will sprout into splendid growth of the superior type of citizen in the fulness of time. As Plato has it in the '*Republic*'.

'If we would persuade them that never at all should one citizen hate another and that it is not holy, such teaching as this is desirable for early childhood'.

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"Death" is mostly "Eat"—JULIUS GILBERT WHITE.

# Ante Natal Care

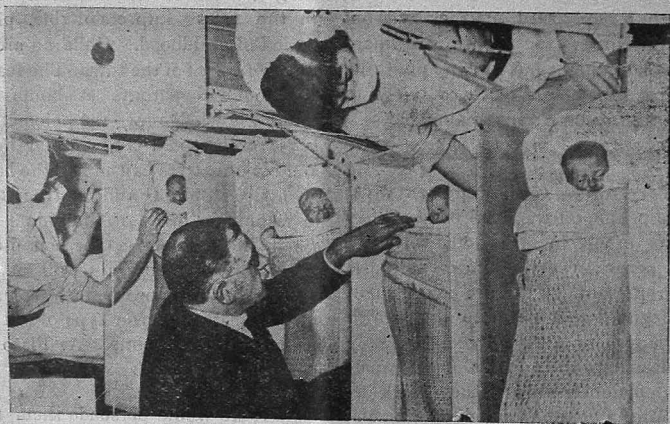
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## Care during Pregnancy

By Dr. S. P. ROY CHOUDHURI, L. M. F., (Beng.)  
Formerly House Physician, Calcutta Medical School  
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Patihar, P. O., (Muzaffarpur).

THE mothers, who give birth to the future generation of our country, are thoroughly neglected in rural areas. This is not intentional but is due to poverty, lack of education and ignorance of the subject. There are also lots of social defects in us. The first and foremost of all is the purdah

not healthy have got to suffer a lot. I have actually seen young girls bearing children dying for want of proper medical aid and treatment. It is really a pity! I, as a medical practitioner, had to challenge many times those old haggards who objected to the treatment of pregnant women. But this



*The four babies of Mrs. Miles born at Eynesbury, in England  
and now in charge of Dr. Harrison.*

system of middle and uneducated class of people. This is one of the greatest social evils. This purdah system alone is responsible for the deaths of many young mothers and bonnie babies. During my practice in rural areas, I have found that no doctor is consulted during the period of gestation (*i.e.* pregnancy).

There may not be any harm to the healthy mothers but mothers who are

is not sufficient. There should be proper propaganda for this. There should be proper demonstration. In every thana health centers ought to be opened, where there should be one, who should point out to the masses these evils with the help of Magic lantern slides, lectures or with the help of leaflets etc. The health authorities should help in the matter. The generous and public spirited men



should come forward to help the movement. In every place there should be organisation for baby shows, in which the necessity for taking care of the expectant mother should be properly demonstrated.

This is an elaborate subject. It is difficult to deal everything in detail within this short space. But I would try to vex my readers with this social problem frequently.

Before proceeding further, I like to give some idea of the subject I am dealing. Pregnancy is not a thing to be neglected. This must get serious consideration in every family. I also point out that pregnancy is not a disease, it is purely a natural and a physiological process. Every expectant mother should know that within her there is one, who for the building of its minutest parts *e.g.*, bone, flesh, nerves, blood etc., requires calcium, sodium, potassium, iron salts etc., from its mother. Thus the child grows within its mother upto the tenth month and then it is born by adding pleasure to the whole of the family. Such being the case we find that the mother is solely responsible for the development of the child. If the mother is healthy and free from any disease, then the child is also healthy and free from any disease, if not the child is either sickly or it would be

dead or still born. So, every responsible member of a family must keep a keen eye on the expectant mother.

The following piece of advice will save many unfortunate girls from untimely death.

1. The family members must consult a good and reliable doctor, midwife or qualified dai in whom the



*A Healthy Mother and Child.*

members of the family as well as the girl who is pregnant have got faith.

2. The pregnant girl must not deviate from the normal path of life she used to lead before conception.

3. The girl must take special care of her teeth as bad teeth are the

origin of many dreadful diseases, so, the modern science teaches us.

4. She must do some sort of physical exercise to keep her muscles active and strong so that she may not be in difficulty during labour as the muscles, specially the muscles of abdomen, play an important part at the time of delivery. But she must keep in mind also that she must avoid violent exercises.

5. She must take her usual diet. She must not take anything in excess. Milk, fruits and vegetables are allowed in moderate quantities.

6. Every expectant mother must be very particular about her bowels. They should not use strong purgatives. They may take laxatives like castor oil, Liquid paraffin etc. occasionally if required.

7. Another most important point which all expectant mothers should know, is about urine. They must be very particular about that. They should send their urine to the nearest doctor for occasional examination in early months but very frequently in later months. Any abnormality in urine should at once be reported to the doctor.

8. They must take their bath according to their own constitution. They should take occasional vaginal douche with great caution so that they may not hurt their womb.

9. They must not use tight dress. All dresses must be loosely fitted. Lower portion of the body should always be kept warm.

10. Every expectant mother must take care of her breasts. They should wash them with Eau-de-Cologne lotion occasionally and the nipple should be drawn frequently to make it fit for the sucking of newborn baby.

11. In later months doctors should be called in for the examination of the child within the womb, for hearing the heart sound and for measuring the hip etc. This piece of advice I hope will save many young mothers from unnatural deaths in rural areas.

12. As a rule the wife should be separated from the husband particularly after the third month. This will also save many unusual troubles.

13. The relatives of the expectant mothers should always keep them happy and cheerful. They must always see at the same time that they do not over-indulge in anything.

The expectant mothers must inform the doctor if any unnatural thing happens to them during the period of ten months. The relatives must encourage them till delivery.

These are a few hints which I wish to give to my readers. If the above advice is carried out, many unfortunate young girls and babies will be saved from premature death.

India is a poor country. It is not possible to help individually. I hope the propaganda, as mentioned above, with the help of medical practitioners, generous public men, local officials and with the help of the health authorities, if carried out, can render much help to the ignorant masses.

# Good Health—

## *How to Keep it*

By Khagendra Nath De,

School of Physical Culture, Calcutta.

### Our Body

ONE cannot expect a good health unless one follows the hygienic ways of living.

We are all familiar with the rapid movements of a railway steam engine running over the rail lines, and we like to watch its swift and smooth progress. The engine however will continue to do its work so long as it is carefully attended to, i.e., oiled and cleaned, and supplied with water and fuel. Just in the same way the human body will continue to work smoothly and vigorously only as long as it is carefully looked after and adequately supplied with food. Very few of us value health as we ought to; generally we regard it as quite an ordinary thing, and do not realise its worth until we feel its want.

To keep the body fit, we require—pure air, cleanliness, regularity in habit, proper diet, and regular exercise.

What is the difference between the person who possesses good health and the person who is in want of it? The person who is in good health possesses a body whose organs work so quietly and regularly that he is scarcely aware of their existence: he has a good appetite and is very often made aware that he has a stomach by its craving for food. One of the very first signs of ill health is loss of appetite. Again, a person in good health is active and fond of exercise: he is

smart in all his movements, and takes joy in using all his limbs. Dislike for exercise is a sure sign of failing health.

We have compared our body to a steam engine working in good order. One of the chief duties of an Engineer is to see that the engine is well supplied with fuel of the right kind, and that there is enough of it for the work that has to be done. In the same manner body needs sufficient food, of the right kind, supplied at regular intervals.

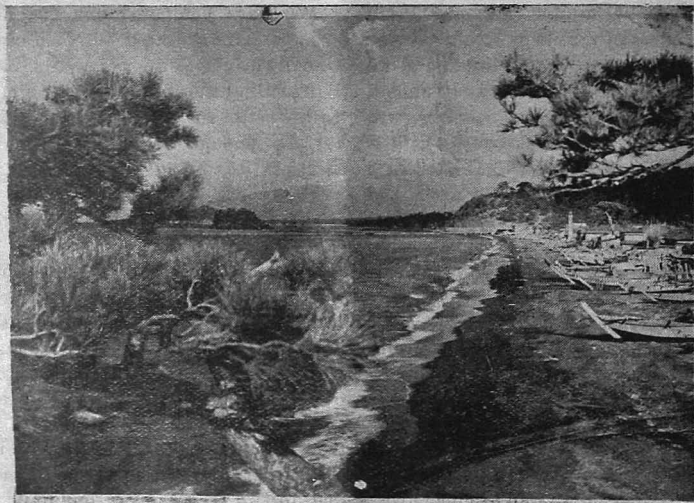
It has often been said that we nowadays suffer from many diseases from which our forefathers were free; the reason is not far to seek. Our forefathers lived mostly in the fresh air outside the congested towns where there was hardly any likelihood of their blood being rendered impure by the germs of diseases of various kinds that float in the air inside buildings in congested places of towns and cities. We can see also that people who live an outdoor life are much healthier than those who have to live and work indoors in factories and workshops. It is not possible for all of us to pass our days in the open air, yet we can all manage to get a good quality of fresh air within our houses.

Pure, fresh air is one of the best disinfectants; the oxygen it contains destroys slowly but surely all waste matters and prevents the body from becoming a breeding place for germs,

and sometimes it is able to destroy the germs as well.

Most people if asked how they breathe would laugh and probably say they did not know it; nevertheless it is important to know the correct way of breathing and to practise it. Some persons take air only into the upper part of the lungs, or at most the upper and the middle; they do not breathe to the very bottom of their lungs, as

should breathe only through the nose, so that the air may be warmed and freed from all dust before it reaches the lungs; we should then try to fill the lungs from the very bottom. A good way to do this is to place the hands firmly on the bottom rib, at the sides, and then, having emptied the lungs as completely as possible, to draw in air slowly through the nose. The first expansion ought to



*One of the most typical scenes in Tokyo, Symbolising Japan. Mount Fuji, with white snow is seen beyond pine tree and typical fishing village near Shizuura, Shizuoka.*

they ought to and hence a part of the lungs is left unused; the blood is consequently not purified so thoroughly as it ought to be.

I suggest some exercises which will not take more than ten minutes, but great benefit may be derived from these, if practised, regularly :—

1 Breathing :—A little attention and practice in this matter will make a great difference in health. We

be felt at the sides, where the ribs are forced apart to make room for the expanding lungs. Do not raise the shoulders but keep them well squared back all the time. When the lungs are full, the breath should be held while we count ten, and thus we should breathe out slowly through the nose until we feel that the lungs are quite empty. Such an exercise as this, performed, say, a dozen times

just before going to bed, and immediately after rising, will strengthen the lungs and give them more power to resist those deadly diseases which are so common.

2. Lift your feet high. Begin and end with slow motion and run fast in the middle of the time.

3. Keep your feet together. Don't bend your knees. Get half way down on each side.

4. Sit on floor with legs stretched, arms sideward raised and the feet apart. As you rotate the trunk from side to side alternately touch the toe of the right and the left feet with the left and right hand respectively.

5. Lie flat on the floor with your hands stretched on either side and resting on your hands and shoulders raise your body. Now bending the legs about the trunk stretch them towards the head keeping the knee straight and toes pointed.

6. Lie flat on the back as before and resting on the hands and the shoulders raise the trunk. Now alternately bend the legs and kick fast in an upward direction.

7. Lie flat on the back with your hands on the hip. Resting on the head and toes lift the body and draw your legs until your forehead rests on the ground. Now move your head backward and forward and to right and left alternately.

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### Medicinal Use of Honey

Honey is highly appreciated as an article of food by the natives of many

parts of India. It is valued as an antiseptic for the preservation of fruits and for making cakes, sweetmeats etc. But the most important use of honey is as a medicinal substance. It produces very nutritive action.

It is sometimes employed as an application over foul ulcers. Hale White says that it can be used as a covering over boils and excoriations. It is also used as a cosmetic or an agent for beautifying complexion.

Honey relieves dryness of the mouth and facilitates swallowing. It is a common ingredient of cough mixtures. It is a mild laxative and may be given to children for this purpose. It is given to produce heat and strength in the body of the child.

Honey is one of the remedies for hoarse voice. It makes the sound melodious and sweet. If it is given with the juice of *Tulasi* leaves it forms the best remedy for cough and cold. It sometimes checks fever if it is taken before one gets it.

It cures pimples and prevents their growth. In old age if one ounce of honey is taken daily with hot water, it gives an extra strength and makes the old work very hard without injury to health. It is a nervine tonic too.

In all kinds of emaciating diseases it may be administered with good results since it enters very quickly into the cells of the body and gives food to them. It improves the general health very soon. For improving the appetite, sharpening the brain, making one smart and active, the daily use of honey will be found of great use.—*The Journal of Ayurveda*.

# Common Infectious Diseases and their Prevention

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A. K. Bhattacharya, M. B. (Cal.)  
Moradabad.

**C**ERTAIN diseases are caused by the invasion of the body by some bacterial organisms known as microbes. Different microbes produce different groups of symptoms and the course of illness is also different in each case. These diseases are known as Infectious. They are communicable from one person to another directly or indirectly. When a large number of persons suffer in a place at a time from one of these diseases, it is known as epidemic. The common infectious diseases of our country are Small pox, Chicken Pox, Plague, Diphtheria, Influenza, Measles, Whooping Cough, Cholera, Typhoid and Tuberculosis. The mode of infection may be by direct contact or indirectly through the medium of air, water, food, drink etc.

When some infective microbes invade the body a regular fight commences between them and the body-resistance or the defensive mechanism of the body. If the body-resistance fails to overcome the microbes, the person falls ill. So that causation of disease depends mainly on the virulence of the invading organism on the one hand and the body resistance on the other. Debilitating conditions e.g., starvation, fatigue, undernutrition, exposure to cold etc. facilitate the organisms to gain the upper hand very easily. Symptoms of the particular disease do not arise as soon as the infection occurs and the

time that elapses between actual infection and the appearance of signs and symptoms of the disease, that is, (the period of struggle between the microbes and the body resistance) is known as the Incubation period which varies in different infectious diseases. There are certain general preventive measures to these infectious diseases:—

(i) *Isolation of the sick*.—By isolating the sick person from healthy individuals the disease gets no chance of spreading. If possible it is always better to remove the sick person to an Isolation Hospital. Those who are required to attend or nurse the patient must be properly protected against the infection.

(ii) *Notification*.—As soon as there is a case of infectious disease it is the moral duty of all to inform the Public Health authorities at once, so that the chance of an epidemic breaking out may be checked promptly by timely preventive measures. Failure in this may result in a severe epidemic which may be very difficult to control subsequently.

(iii) *Vaccination*.—This is a very satisfactory way of preventing at least some of these diseases. Small-pox, for example, can surely be prevented by timely vaccination and revaccination.

Diphtheria, Plague, Cholera and Typhoid can also be prevented by timely inoculation:

(iv) *Disinfection*.—Disinfection by suitable disinfectants of beddings, clothing and utensils etc. used by the patient is also the room and furniture of the room occupied by the patient, is a necessary preventive measure.

The details of properly disinfecting the excreta of the patient as also the hands of the attendants and nurses are of outstanding importance.

(v) *Quarantine*.—The infected person should be forced to remain isolated during the infective period of the disease, in order to avoid spread of the disease. Those persons who have a chance to come in contact with the diseased person or have resided in the same room, or have slept with the patient etc., should be similarly treated.

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## Trees and National Health and Efficiency

In a Chadwick Trust Public Lecture Mr. St. Barbe Baker the Founder of "The Men of the Trees" Society, has been giving us furiously to think over a novel problem. And first it must be said that Chadwick, in whose memory the Trust was founded as the pioneer in demonstrating the causes of ill-health, has shown we can defeat what hitherto has been accepted as Fate by getting behind Fate itself. He would have been the first to endorse the lecturer's thesis that man's health and efficiency are largely dependent upon trees, or more properly upon their conservation. Trees, as geologists show us, appeared before man, but on his arrival he at once engaged in that unremitting attack on the forest which has resulted in deteriorations of climates and diminished productiveness of soils, while the

immediate evils to the human race have been the lessening of fuel and the diminution of water. Yet though the lecturer showed, that from remotest ages men had cultivated trees in sacred groves, they failed astonishingly to appreciate the benefits of forestry. Destroying, felling, and burning recklessly, they turned forests into deserts and so ended many an ancient civilisation. That was the story of vast tracts of land in Asia beyond the confines of China, besides once fertile lands and thronged countries surrounding the Mediterranean, and when Egypt was at the summit of her glory, large parts of Africa, now forbidding deserts and Sahara, were tree-covered and fertile.

The disastrous process, Mr. Baker declared, is still going on. North of the Gold Coast where, after destroying the forest, their primitive methods of farming induced the tribesmen to migrate to fresh areas of fertility, the sand deserts they create are following after them, invading the cultivated land and burying the feeble crops. With the end of the forest in sight, the chiefs forbid marriage, and racial suicide on a bigger scale than any known is the result. All over the world the same thing is seen. In Nigeria, through lack of supervision, thousands of pounds' worth of valuable mahogany is being cut and burned to clear the ground for farming; so much so, that it has been calculated the cost of trees destroyed to secure a native's meal of yams would be more than paid by an epicure for the rarest out of season's delicacies at the Ritz! It has been said, continued the lecturer, that trees are a potent barrier against disease, the wide forest-belts surrounding so many towns in France

having the effect of stopping the invasion of epidemics; what is better, said though, is that if a nation saves its trees, they will save the nation. Nowhere, he declared, is forestry so backward as in Britain and quoting the Prince of Wales that "Fine forests make fine men," he asked if a progressive forest policy would not help to solve unemployment if even 25,000 young men could find work and with it recreation of body, soul, and spirit in forestry?—*The Medical World*.

## The Noise Nuisance

The increase of noise in recent years has become a serious disease-producing factor in modern life. The automobile with its rubber tyres has changed street noises somewhat for the better, although the tooting of horns is still a nuisance of no small proportion that ought to be abated.

Physiologists by careful laboratory experimentation have shown that noises even though not loud enough to awaken a sleeper, are recognized by the nerve centres and cause nerve reactions so that sleep is disturbed, and rendered less refreshing than when undisturbed. The continued hammering of noises upon the auditory nerves, especially aggravating and unnecessary noises, often becomes an unbearable strain upon the nerves of a sensitive invalid. Even when one becomes accustomed to noises such as those produced by trains and street cars, the nerves are nevertheless subjected to harmful wear and tear that cause serious loss of energy and may be a handicap so grave as to prevent recovery in a case which would, under quiet surroundings, make rapid progress healthward.

Of course there is something to be said in favour of noise. H. G. Wells declared in a recent discussion at an anti-noise conference in England that he would prefer our present noisy world to a silent one; and Lord Horder said he needed the stimulus of London street noises to make his brain work. Bismarck declared, however, that he slept sounder in Berlin, with all its street noises, than at his estate in the quiet country. Many people sleep well when a train is in motion but awaken when it stops. Monotonous noises, according to Pavlov, cause sleep by a sort of hypnotic effect. Many years ago, when an ice dam above Niagara Falls stopped the roar of the cataract in the middle of the night, the silence awakened the town.

Continuous, monotonous, rhythmical sounds appear to be less harmful than sudden, unexpected, intermittent noises, such as the shrill whistles of locomotives, the shrieking of fire-engines and police-car sirens, and the blowing of factory whistles. Millions of people are daily inconvenienced and injured by these assaults upon their ears, and measures for suppressing them should be provided by legislative bodies. The public has endured the noise nuisance far too long. Patience has ceased to be a virtue in this case, if it ever was such, and the time has come for a long suffering public to revolt and demand that unnecessary noises should be suppressed.

Freling Foster says (*Collier's*) that Finland has recently made a law prohibiting all unnecessary street noises, such as motor horns, traffic whistles, hand-organs, cries of newsboys and hucksters.



Finland has for many years shown a progressive spirit which may well be imitated by other civilized countries. Originating in a Tartar tribe related to the Turks, while retaining an ancient oriental language, Finland has advanced to the foremost rank of modern civilized states.—*Good Health*. (U. S. A.)

## Sea-bathing

In considering the treatment of surgical tuberculosis sea-bathing, it is said, has a very real claim to our consideration. Two pioneers in the therapeutic application of sea-bathing were Lettsom and Richard Russell, generally known as "Sea water Russell" (1687-1759). In the early part of the eighteenth century Russell wrote two books on the efficacy of sea-bathing, and sea-water drinking in the cure of various diseases, especially tuberculosis of glands, bone, joints, and skin. He claimed that his observation had shown that fishermen rarely had scrofulous diseases, and that their women had beautiful complexions, good teeth, and sound gums. The value of the associated sun-bathing seemed to have escaped him. Brighton owed much of its popularity to Russell. As time went on, the pleasures of sea-bathing caused its therapeutic effects to be overlooked. Lettsom however, impressed by Russell's work, founded the Sea Bathing Infirmary, now known as the Royal Sea-bathing Hospital at Margate. Sir Henry pointed out that the Napoleonic wars gave a great impetus to the search for the cure for tuberculosis in France, and investigations ultimately led to the establishment of the first seaside institution at Berck, followed, by

numerous others. His own interest in and love of sea-bathing dated from childhood, and he attributed much of the good health he had enjoyed to summer holidays spent on or in the sea. When he started the Cripples' Hospital at Alton, in 1908, he immediately practised sun treatment on the children under his care. And, later, when a marine beach was secured, sea-bathing was started as a therapeutic measure. The sea-side branch at Hayling Island was ideal in situation and climate. The whole success of the treatment depended on the ability of the patient to respond to the strong stimuli supplied. Those who did not possess that ability were not exposed to these stimuli until their powers of response had been fortified and attuned. Cases likely to respond very satisfactorily were children of good constitution who, even if their local lesions caused anxiety, could react well. In his view children over the age of five years, with good digestion, who were doing well, were braced by exposure to cold air, and reacted well to natural stimuli, would almost always do better still at the seaside. Marine treatment offered the readiest means of beneficially influencing basal metabolism, which could be greatly increased. The quickened tissue change affected diseased as well as normal tissues, expediting healing processes. The sense of physical well-being, under the combined action of sun, sea air, and seawater was very valuable as an aid to cure. Sir Henry outlined the procedure adopted with children during and after the bath, and described the voracious appetites and the vivacity developed.—*From British Medical Journal of 2nd Nov. '33, Page 1026.*

# Health Tit-Bits

**Health and Good Cheer.**—Hope and good cheer enliven all the processes of life, quicken the heartbeat, increase the play of nerve impulses through the body, and facilitate the action of all the vital functions. So these are two things that every one should cultivate. We ought to make it our business to make sun-shine.

Sometimes there are clouds in the sky, but there is always sun-shine beyond the clouds. When it is dark without, it is all the more necessary to make sun-shine within. When you look into a mirror, you see the reflection of your face, and when you come into a room where there are many mirrors, your face will be reflected many times.

Our faces are like mirrors; they reflect the joy or gloom which comes before them. If a person comes with a sad face, his face casts a gloom over all. Another enters, his face shining with good cheer, and he brings an influence which you feel striking down in your heart.

We must think cheerful thoughts as much as we think of living properly and behaving ourselves with propriety before the world; we should consider this a privilege as well as a duty.—*Good Health* (U. S. A.)

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**Coffee Harms Women More than Men.**—Coffee affects women more than it does men. This is shown by experiments made by Doctors Kathryn Horst and J Robert Willson, of the University of Michigan Medical School, and reported to the American

Society for Pharmacology and Experimental Therapeutics (*Science Service*). They arranged that a group of seven men and seven women should drink coffee one day of each week for several weeks, on the other six days they drank decaffeinated coffee.

The effect of the drug was determined by careful measurements of the tremor in the index finger. The frequency of the tremor was not changed but its amplitude was increased for several hours after a single drink of coffee. Twice as much caffeine was required to produce this result in men as in women.—*S. in Good Health*. (U. S. A.)

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**Poverty Increases Sickness.**—There have been conflicting reports about the effect of the economic situation upon health. Many evil consequences have been noted yet the death rate has sunk to lower figures than ever before. The United States Public Health Service and the Milbank Memorial Fund have united in an investigation, the results of which have been printed by the Public Health Service. Mortality is by no means an accurate index of sickness. The number of cases of illnesses severe enough to be remembered and reported is seventy-five to one hundred times greater than the number of deaths.

Studies were made of 11,511 families, with 49,136 members in ten localities, urban and rural, during three months in 1933. Disabling illness was found to be forty-eight per cent higher among families having

no employed wage earners in 1932, than in families having full-time workers. The group of families that had dropped from fairly comfortable circumstances to relief rolls during the depression showed a rate of disabling illness seventy-three per cent higher than that of persons who had remained in the comfortable cases all the time. Conclusions drawn from these figures will be published.—*S. in Good Health.* (U. S. A.)

### **Destruction of Rats in Ware-**

**houses.**—The destruction of rats has been studied for many years by Lior of Havre, because of the losses incurred as the result of the presence of rats in the warehouses of this port. At present, only poisons and viruses are employed in France. When a few rats have been killed the colony migrates, but it returns as soon as danger ceases. The majority of rats killed are males (131 out of 140 in one week), hence the re-established colony does not diminish in number. Lior maintains that cats are the most efficacious agents against the rat menace in seaports. It is unnecessary to attempt to breed a special rat-catching cat. All that will take care of itself, because if the cats are protected and well fed they soon become powerful enough to attack rats. Lior did not belittle the value of bull terriers but thought their usefulness was lessened by the fact that the rats hear the noise made by dogs, whereas cats work much more quietly. The smaller the number of cats in a given space, the better the results. In Italy, when Mussolini ordered the drainage of the marshy regions near Rome, 3,000 cats were brought to destroy the rats so that they

would not interfere with the raising of grain on the drained soil.—*J. A. M. A., Sept. 21, 1935.*

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**Campaign against Noise.**—New York's campaign against noise was officially opened, October 1, with instructions from Mayor La Guardia to the police department to warn offenders and try to educate the public without making arrests. The sounding of automobile horns between 11 P. M. and 7 A. M. is forbidden, and the citizens have been admonished to keep radios at a moderate level. The city government announced that measures would be taken to eliminate as much as possible of the noise of its own employees. The sanitation department, which has been cited as one of the chief offenders, will have new trucks with pneumatic tires, and the garbage collectors have been ordered to be more quiet in their handling of ash and garbage cans in the early morning hours. The police department is to have 400 of its horses shod with rubber shoes. Orders have been issued to keep all blowing of sirens on fire and police equipment to a minimum. Police inspectors were ordered to submit every morning until further notice, a consolidated report of admonitions and warnings given by patrolmen during the 24 hours ending the preceding midnight. During the first 3 days, 4,071 warnings were given, and 9 summonses were served. The League for Less Noise has established a bureau to receive and investigate complaints, among which it was said that automobile horns and barking dogs were most frequently mentioned, with the Department of Sanitation trucks a close third. The campaign against night noises continued throughout October; in November, the action was begun to reduce the daytime din of the city.—*American Medicine.*

# Health Calendar—1936.

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## JANUARY

Wed.	1	<i>New Year's Day</i> Begin the year aright. Health is Wealth
Thurs.	2	India expects every person to do his public health duty
Friday	3	Roentgen announced the discovery of x-ray 1896.
Sat.	4	<i>Vaikunta Ekadasi</i>
Sun.	5	As is the home so are the people
Mon.	6	The practice of fasting is extremely beneficial to the body
Tues.	7	"Self help in Health" is the appeal to you
Wed.	8	Every person has a share in the prevention of disease
Thurs.	9	Are you physically better or worse than a year ago.
Friday	10	Health is the nation's greatest defence.
Sat.	11	Eat to live, live not to eat.
Sun.	12	The Sun is the God of Health.
Mon.	13	<i>Bhogi.</i>
Tues.	14	<i>Pongal.</i>
Wed	15	A happy home gives a healthy life.
Thurs	16	The children of a nation are its greatest asset.
Friday	17	Keep all flies out of your house.
Sat	18	The progress of many diseases can be checked if detected early.
Sun	19	The pioneer of the king is in the health of his people.
Mon	20	<i>King-Emperor George V died.</i>
Tues.	21	Smoking does no good to a growing lad or girl.
Wed.	22	Care spent upon children's welfare is richly repaid
Thurs.	23	Healthy work gives healthy body.
Friday	24	Physical fitness means national efficiency.
Sat	25	Report cases of communicable diseases to local officials
Sun.	26	<i>Jenner died 1823.</i>
Mon.	27	Children never forget the lessons of a clean home
Tues	28	Out of drink, out of danger.
Wed.	29	Filth is the mother of diseases.
Thurs	30	A bad smell is nature's danger signal.
Friday	31	Nourish the sapling to make strong the tree.

## FEBRUARY

Sat.	1	Nature improves one's health.
Sun.	2	Fresh air is always beneficial."
Mon.	3	<i>Laugh and grow fat.</i>
Tues.	4	Spit borne diseases are preventable.
Wed.	5	A dirty house damns body and soul.
Thurs.	6	Work and live in plenty of fresh air.
Friday	7	Nothing good is got by worry.
Sat.	8	Chew your food the stomach has no teeth.
Sun	9	Report births and deaths to local officials.
Mon.	10	Roentgen, the discoverer of x-ray died 1923.
Tues.	11	Man is the most precious capital of the state
Wed.	12	He lives twice who lives well.
Thurs.	13	Keep the body resistance high fresh air helps.
Friday	14	Do not eat between meals.
Sat.	15	Health begets strength and character.
Sun	16	Excess calls in the Doctor.
Mon	17	Custom in youth, nature in age.
Tues.	18	<i>Madras Medical College established 1835.</i>
Wed.	19	Dust contains the germs of disease.
Thurs.	20	<i>Lord Lister died 1912</i>
Friday	21	<i>Maha Sivarathri.</i>
Sat	22	Never be in a hurry when you are eating.
Sun	23	Flies spread disease.
Mon,	24	Are you giving a square deal for your health?
Tues.	25	Healthy recreations make youthful bodies.
Wed	26	<i>Ash Wednesday.</i>
Thurs	27	Better health—better nations
Friday	28	What the child is, the man will be
Sat.	29	Most persons learn basic Hygiene at home.