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WHAT IS

HEALTH PROPAGANDA BOARD?

It is a Voluntary Organisation which aims to

Develop "Health Conscience"

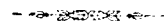


WHAT IS HEALTH CONSCIENCE?

Well, go through the pages of

"Arogya Margam" regularly and

you will know everything about Health



Dr. U. D. Gopal Rau, Hony. Editor.



AROGYA-MARGAM

A MONTHLY JOURNAL DEVOTED TO
HEALTH & HAPPINESS PUBLISHED
UNDER THE AUSPICES

Vol. I

OF

No. I

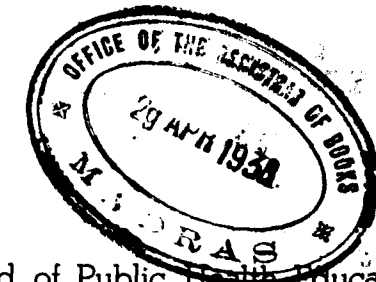
THE HEALTH PROPAGANDA BOARD, MADRAS

• A P R I L •
1938

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EGMORE :: MADRAS

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FOREWORD

Activities carried out in the field of Public Health Education by voluntary associations are of considerable value for the furtherance of Public Health and will be useful and necessary adjuncts to the work carried out by the Public Health Department. There is no doubt that better progress can be made in the advancement of Public Health and the activities undertaken can be rendered more effective if the official agencies are supplemented by a large number of voluntary organisations similar to the Madras Health Propaganda Board throughout the Province. The great preponderance of Public Health work is still in the hands of Governmental agency and must continue to be so; but at the same time, the work of voluntary associations has contributed to the awakening of the public to the realities and importance of health. Environmental hygiene has made great strides, but the personal and communal health has not received sufficient fillip and it behoves all agencies both Governmental and voluntary to direct their attention to the latter. Here is the field 'par excellence' for voluntary workers whose influence cannot but have a beneficial effect. Constant and continuous propaganda is an essential which is not lost sight of even in countries more advanced than ours and it is therefore an activity which should always remain in the fore-front.

A great many of voluntary agencies like the Health Propaganda Board are fortunate in having doctors as members whose technical knowledge cannot but have an abiding effect on such ventures and also help in rousing the public to adopt measures for the eradication of preventable disease and in developing a "health conscience". The family doctor plays as great a part in promoting Public Health as the members of the Public Health Department in that the former has the advantage of coming into contact with parents, infants, toddlers and grown-up children in virtue of his position and is therefore in a position to diagnose their physical or other defectives in time and apply or advise the necessary corrective. In drawing attention to this aspect, the object is to make the Health-workers and Doctors feel that they are inter-dependent and cannot move in water-tight compartments.

HEALTH PROPAGANDA BOARD, MADRAS.

Advertisement Department

PANTHEON ROAD,
EGMORE, MADRAS.

The following are the rates of advertisement in the Journal
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Only firms of highest standing are permitted to take part in the pages of the Journal "Arogya Margam".

Advertisements will be classified pertaining to the Health subjects.

O Blessed Health!

*With thee the pleasant Spring blooms
in its Beauty;*

Without thee no one is Happy.

OURSELVES.

THE HEALTH PROPAGANDA BOARD was founded in 1921 and was the offspring of the old Health and Welfare Association. It was due to the laudable efforts of the late M.R.Ry. Diwan Bahadur L. D. Swamikannu Pillai Avl., I. S. O., that the Board was constituted by means of Trust Deed with a Trust Fund to carry on its useful work. The late Diwan Bahadur Swamikannu Pillai was its Chairman and continued till his death as its Chairman. He was succeeded by the late Diwan Bahadur Dr. C. Natesa Mudaliar, M.L.C., whose Chairmanship was also continued until his most lamentable death.

The Board quite recently felt that it will be doing very useful

service to the public at large by issuing a monthly journal as part of its legitimate work, thereby disseminating really useful and valuable knowledge and information for the benefit of the public and this new venture, the Board earnestly hopes, will be a welcome addition to the group of similar journals issued in this Presidency and elsewhere.

Marvels of modern medical research and scientific knowledge have brought into broad day-light a mass of knowledge as to how diseases are caused, how they spread, how they play havoc in the masses and how they could be resisted easily and prevented by timely measures. Everyone who enjoys the bliss of such knowledge could be a source of light in

It is needless to point out that the work of any association is doomed to failure unless it reaches the rural population, whose improvement in matter of health must be the first plank in any health scheme.

2. The objects of the Madras Health Propaganda Board being the stimulation and promotion of interest in, and knowledge of, all matters connected with the general and personal health of the population of Southern India, the journal "AROGYA MARGAM" which the Board proposes to publish will, it is felt, be a medium through which the Board can aim to reach the general public in every part of the province. In publishing the journal, there is no doubt that the Board has taken a step in the right direction.

The number of popular Health journals published now in Southern India is very few. I hope the endeavour of the Madras Health Propaganda Board in bringing out a monthly journal of the type of "AROGYA MARGAM" will serve a very useful purpose in placing before the public facts and figures of the recent advances made in Public Health and preventive medicine will be welcomed by the public.

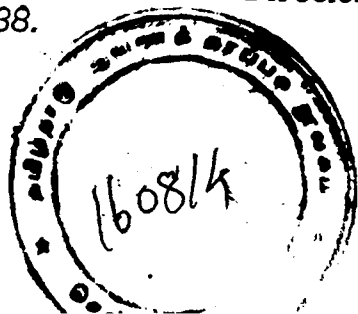
3. The journal "AROGYA MARGAM" appears to be comprehensive and I congratulate the Health Propaganda Board on their venture and I should like to suggest, if I may, that an effort should be made to publish the journal in all the languages of the province. It is perhaps too early to expect the Board to incur expenditure on this scale, but I trust that it will be borne in mind and given effect to when experience and financial considerations permit of expansion their laudable endeavour.

C. M. GANAPATHY,

Lieut. Col. I.M.S.,

Director of Public Health, Madras

6th April, 1938.



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IMPORTANT

All the manuscripts for publication, books for review, Exchange of Journals and other correspondence relating to the Editorial Section should be sent to the MANAGING EDITOR, *Arogya Margam*, 57, Thambu Chetty Street, Madras.

Original articles are accepted with the express understanding that they are contributed solely to this journal. All matters published in *Arogya Margam* is copyrighted.

The manuscripts must be typewritten, and double spaced, and the original copy should be submitted. Blocks for illustrations will be supplied by us if the original illustrations are sent.

The Managing Editor reserves the right to alter, delete, or make necessary changes in the matter sent for publication. No reasons will be given for rejecting articles.

All business correspondence, advertisements, subscriptions, and other payments should be made to the SECRETARY, HEALTH PROPAGANDA BOARD, Pantheon Gardens, Pantheon Road, Egmore, Madras.

ADVERTISEMENTS

Complete copy, instructions and blocks must reach this office not later than the 5th of every month in which the advertisement is to appear. It is understood that the old text (running) is to be printed, if no new copies of advertisement reach this office a month previous to the date of publication of *Arogya Margam*.

the family to dispel the darkness brought by ignorance, illiteracy and superstition. It is our ambition to bring home to the public the various factors that undo, undermine, and ultimately ruin the most delicately constructed human mechanism and how the invasion could be faced and prevented by suitable measures.

Maternal health and infant welfare are problems in which every one of us is interested. But our time-long customs, environment and superstitions have subordinated the scientific side of the problems and substituted a belief in destiny and fate when attacked by disease and death. The sense of hygiene and sanitation has to be felt by the masses. A lack of this, mainly accounts for the appalling figures of maternal and infantile mortality.

Whatever might be the broad programmes of preventive measures adopted by the public health authorities and other health workers to combat dangerous and infectious diseases, they cannot but prove unsuccessful unless there is active and intelligent co-operation from the masses. It is our desire to create in the minds of the masses a thirst for the practical application of the simple

rules of hygiene and sanitation in their daily life.

How to prevent dangerous and infectious diseases? What are the protective measures when an epidemic breaks in a place? What would be the danger and havoc to the public when one hides an infectious disease? These are some of the questions which the masses ought to know. Illiteracy and the consequent fear of health officials have much to do towards the spread of diseases. It is our aim to throw open in the columns of our journal the light of scientific knowledge on diseases and their prevention and thus we hope to combat illiteracy and dispel the fear of disease from the masses.

It is also our desire to serve the public by rendering medical advice in all matters concerning health matters through the columns of our journal. We, therefore, welcome questions pertaining to health and disease. We welcome suggestions from public health authorities and other health organisations in the Presidency to further our object of making the journal a "Health Guide" in every home.

—HEALTH PROPAGANDA BOARD,
MADRAS,

History and Origin of the Health Propaganda Board.

THE HEALTH PROPAGANDA BOARD was started in 1921, "for the purpose of and with the object of stimulating and promoting an interest in, and a knowledge of all matters connected with the general and personal health of the population of Southern India; for the encouragement of sanitary and hygienic habits among all classes of the people; for the diffusion of information concerning epidemics and the means of combating them; and for such other objects cognate to the promotion of the public health, as may be decided upon."

The Board has been busy only in preparing the necessary propaganda materials, among other things referred to later on, by arranging for lectures by experts so that they may be taken as object lessons by those who are directly entrusted with propaganda work. The lectures under this Board are of a different type and character and by a different set of men from those either by the Corporation or by other Associations. Quite recently it has struck a new path which has created a very good impression by giving opportunities to all Health Officers in the Presidency to gather and exchange notes and views by means of its provincial Health Conferences. It has not so far affected or run counter to the work of other institutions.

In a memorandum on Health Propaganda Work submitted to Government in 1923, Major J. Cunningham, I.M.S.,

the then Director of the King Institute, Guindy, said:—"The Health Propaganda Board is one of the new institutions which has arisen out of the ashes of the old Health and Welfare Association. Constituted in 1921, it, at present, consists of eight members nominated by various interests, both lay and medical, official and non-official, under the Chairmanship of M. R. Ry. Dewan Bahadur L. D. Swamikannu Pillai Avl., I.S.O. The pictures, charts and posters which form the major part of the old Health Exhibition inaugurated by the Health and Welfare Association together with the lantern slides which belonged to the same Association, have also been handed over to the Board and form its sole stock-in-trade. The exhibits and the sets of lantern slides continue to be lent out on demand. One of the essentials for a properly organised system of propaganda is a central agency which will direct the general scheme and co-ordinate the activities of the various bodies engaged in propaganda work. Such an agency may either be directed and controlled by the Government or be the outcome of private enterprise. Although Government are vitally interested in the advancement of public health, *I am of opinion that such a position will be more suitably occupied by a non-official body and I submit that the Association best fitted to assume control of public health propaganda in the Presidency would be the Health Propaganda Board which has indeed been incorporated for this very purpose.*"

This Board has been active in the following directions:—

(i) The printing and publishing of all propaganda materials such as posters, leaflets, etc., for other Associations as far as the funds of the Board permit.

(ii) The Board has been arranging public meetings lectured upon by experts so that it may not interfere with popular lectures organised by other organisations.

(iii) The Board has been arranging Conferences and seeking the

co-operation of other bodies in the matter of starting a Health Museum and Library.

The Health Propaganda Board has had a continued existence doing sustained work and has achieved something of usefulness throughout the Presidency. May we not appeal to all those whose hearts tingle with the impulse for service to humanity and realise the necessity for an early alleviation of suffering humanity from the grips of disease and ill-health, to appreciate the humble services which this Board, through stress and storm, has been able all these years to render to the people of this Presidency.

—O—

The solid work done so far will be obvious from the particulars given below:—

CONFERENCES

Year.	Month.	Date.	Subject.	President
1931	January	14th and 15th	Health Conference	Major-General C. A. SPRAWSON, C.I.E., V.H.S., I.M.S., Surgeon-General with the Government of Madras.
1932	August	5th and 6th	Medical Inspectors of Schools	Lieut.-Col. J. R. D. WEBB, O. B. E., I. M. S., Director of Public Health, Madras
1936	December	12th and 13th	Maternity and Child Welfare	Major-General Sir Frank P. CONNOR, Kt., D.S.O., K.H.S., I.M.S., Surgeon-General with the Government of Madras.

APRIL 1938

Health Propaganda Board, Madras.

(REGD.)

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Honorary Secretary & Treasurer:

2. Dr. S. G. MANAVALA RAMANUJAM, M.A., Ph.D., D.I.C.

Members:

3. M.R.Ry. S. G. RANGA RAMANUJA MUDALIAR Avl.,
B.A.B.L., Bar-at-law.

4. M.R.Ry. DEWAN BAHADUR
M. BALASUNDARAM NAIDU GARU, C.I.E.

5. M.R.Ry. RAO BAHADUR M. C. RAJAH Avl., M.L.A.

6. Lt.-Col. C. M. GANAPATHY, M.C., I.M.S.

7. Dr. N. S. NARASIMHA IYER, M.R.C.S., L.R.C.P., F.R.C.S.

8. Dr. U. D. GOPAL RAO, L.M.P.

9. Dr. M. SANJEEVA RAO, M.B.B.S.

10. M.R.Ry. H. M. JAGANNATHAN, M.L.C.

Registered Office:

"PANTHEON GARDENS,"
Pantheon Road, Egmore, MADRAS.

Town Branch:

57, Thambu Chetty St.
MADRAS.

Colds and Sore-throats in Infants.

(DR. M. SANJEEVA RAO, M.B.B.S.,)

Ear, Nose and Throat Institute.

20, Thambu Chetty Street, Madras.

A Casual glance into the weekly mortality statistics in any popular newspaper will reveal to the reader the heavy death roll among young children from respiratory diseases like pneumonia and broncho pneumonia. The average citizen must realise that most of these diseases are preventible, as they invariably develop from neglected colds and sore-throats, while their cure when once established is very uncertain and mortality heavy. Prevention of this death-roll is practically impossible without the intelligent and willing co-operation of the parents.

Briefly stated, colds and sore-throats are largely the results of direct germ infections of the nose and throat, rendered susceptible to their attacks by equally important devitalising factors.

(1) Direct germ infection.

Indiscriminate kissing of infants and young children is the most obvious and fruitful source of direct mouth to mouth germ infection. The dumb infants are helpless against these atrocities—atrocities they really are—for we have only to stretch our imagination to realise what our own feelings would be, if perchance, we were forced to submit to being kissed by every passer-by—some with foul-stinking mouths, some with decayed pus-ridden tooth sockets or dripping noses or still others just convalescent from diseases like Influenza or Diphtheria. Yet this is precisely what happens when a young infant is

passed from hand to hand to all the visitors in the house, to be fondled and kissed.

Another fruitful cause of direct infection is indiscriminate coughing, sneezing or blowing of the nose in public without duly protecting the face with a handkerchief. The fine liquid spray ejected from the infected mouth or throat contains millions of these deadly germs in their most virulent form. In a house with many children, the inmates suffering from severe colds and sore-throats should carefully segregate themselves from close contact especially with the young.

Devitalising and predisposing causes.

Young infants and children are more vulnerable to attacks of colds and sore-throats, and to the development of their dangerous lung complications, as their tissues have not had time enough to acquire immunity or resistance to the attacks of these germs. The natural protective mechanism is in the process of being organised and built up, and for its proper and uninterrupted development, two factors are essential, viz.,

- (a) *proper assimilation of the correct quality and quantity of food;*
- (b) *proper acclimatisation to plenty of fresh air and sun-light.*



Throat affections in Children should always be very carefully watched.

The young infant has to get abundant energy from its food intake, for its incessant activities and rapid growth, and it is only by constantly bearing in mind the untiring and ceaseless activities of the rapidly growing healthy infant, that we can appreciate the value of correct assimilation of the right quality and quantity of food. The tissues of the body generally, and especially of the nose and throat, containing protective mechanism built up by faulty nutrition are bound to be weak in their resisting powers to infections and very easily susceptible to the attacks of disease-producing germs. A child or infant may somehow or other manage to exist or grow *in years only* on a faulty or badly assimilated diet, but the real test of healthy life is growth in body and mind. Every parent should take the elementary precaution of weighing the infant every month and satisfy himself that it is really growing in proportion to its age.

For infants under a year, good milk from a healthy well-fed mother is undoubtedly the best and cheapest and

all artificial substitutes, besides being costly are only permissible under the express permission and direction of the family physician. The infant should only be fed at regular intervals and only clear water given in between the feeds, and it is well to bear in mind that children thirst as much for water as adults do, especially in tropical climate. The ignorant mother who puts the child to the breast every time it cries strangely forgets that there may be a hundred other reasons for her child crying, and hunger is certainly not the only one of them.

Infants from their birth should be acclimatised to live in well-ventilated rooms with plenty of fresh air and sunlight, with as little clothing as possible. Exposure to sudden changes of temperature is liable to produce colds, as for instance, taking the infant from the smoky room after a hot bath and exposing it to the cold air under a fan or from a stuffy cinema hall to the cold and chilly air outside.

Attention to some of the common-sense details regarding the care of growing infants and children in their earlier years will not only prevent the heavy infantile mortality, but also diminish the large number of cases of chronic invalidism in children, such as discharging ears or deafness, Tonsils or Adenoid troubles, and a host of other minor troubles, too numerous to mention. It is a great mistake to run to the family physician only when the children are seriously ill and avoid him at other times. The right place for the family physician in future will be as sustainer of the good health of the family, by timely advice on simple health rules, timely inoculations during epidemics and constant supervision to see that the good health of the family is maintained.

Noise

And

Public Health

WHAT is a nuisance? Nuisance is usually defined as anything working hurt, injury or discomfort to one or more of His Majesty's subjects. Certain nuisances, for example, excessive dirt, smoke, odour or dampness have already been defined in certain clauses of Public Health Acts. There is no specific act upon the Statute Book concerning the regulation of noise. Excessive, offensive, persistent or startling noise is certainly an offence against the common law of the country. Something must be done to mitigate the noise. Its effect on the mental development and equilibrium is untold and unlimited.

Lord Horder, Physician-in-ordinary to H. R. H. the Prince of Wales, related in a broadcast how he was watching a healthy child asleep in a London house during the "silence period" of motor horns when suddenly the silence was broken by the roar of sports model car.

"The child continued to sleep," said Lord Horder, "but its breathing changed from a deep slow rhythm to a shallow quicker rate, its happy smooth face clouded over and it turned restlessly on to its side as though to escape

from some hostile influence. What I saw happening to that child is happening in greater or lesser degree to all of us. You stand up to it, of course, or most of you do, but what does it cost you to do so. We doctors could tell you; only it is not good doctoring to appeal to healthy persons by intimidating them. Your resistance to noise, a great deal of which is entirely needless and preventable, costs you something that you cannot afford to pay and a lot of you, are 'down-drawn' already."

There are some difficulties in the abatement of noise. When a definite nuisance is being caused, one could note the time, place, etc., and inform the local authorities, who would investigate and report on the advisability of issuing a warning or prosecution. Upon the officer of local authority will, therefore, rest the chief responsibility of definitely deciding whether a nuisance has been actually caused or whether it comes within the types of nuisances defined by the appropriate clauses of the Act already in existence.

If common sense methods be applied, there will usually be no difficulty in mitigating the nuisance which can be

definitely traced to any particular source. But in respect of noise whose source is not easily determined, the position is much more difficult. 75% of the noise are due to vehicular traffic. Street-sellers and street quarrels contribute also to a small percentage of the noise.

The institution of special "Silence Zones" within which the creation of unnecessary noise by motor vehicles is completely forbidden during certain hours has been the work of recent months. Various attempts have been made to estimate the intensity and character of various types of noises. It has been shown that street noises are capable of reaching an intensity so great that the energy liberated by the impact upon an artificial membrane is as much as 20 dynes per square centimeter. Of the latter quality, 75 per cent can be traced to vehicular traffic.

It is earnestly hoped that the local authorities would take cognizance of the immense harm to the public by the undue noise, that is being caused in our City. Its bad effect both on the child's mind and brain-workers could not be over-emphasised. The undue noise that is often produced by the honk of the motor horns in residential quarters could easily be controlled by necessary legislation. So also, the noise created in unlicensed depots situated in residential quarters. Street quarrels and other street noise could easily be controlled by educational propaganda.

—
*"Quiet Mind go
 In Fortune or Misfortune
 Like a Clock
 During a Thunderstorm."*

THE CRAZE FOR QUACK MEDICINES.

Health can only be fully maintained by a definite regime of healthy living which involves consideration of such factors as feeding, exercise, rest, cleanliness, regular habits, moderation and precaution against infectious diseases. The general public proceeds to neglect all or most of these principles and then when the body rebels and breaks down from the long standing abuse, it seeks in somebody's patent concoction which is supposed to cure anything from ingrowing toe nails to paralysis.

Whatever the ailment, whether it be malnutrition, rickets or gastric trouble

due to faulty feeding or 'break-downs' due to body neglect, the one sovereign remedy which the public demands to alleviate its own neglect is medicine, the material benefit from much of which is an improvement in the health of the bank balances of the patent medicine manufacturers. It may be stated that more medicine is taken in this country per head of the population than in any other country. This Craze for drugs merely serves to prove the credulity and the gullibility of the educated public.

—HEALTH PROPAGANDA BOARD,
MADRAS.

What is Malnutrition?

MALNUTRITION is not an insufficiency of certain protective and other food stuffs. It is a complex of factors, e.g., lack of calcium and other minerals in moorland waters, the lack of sunshine, excessive fog from factory chimneys, heavy rains, cold and damp, lack of open down land or generous open building spaces, deficiency of freshly grown local agricultural products, drab tree-less streets, slum standard homes, a poor heredity, the absence of gardens, mentally and morally depressing influences of continued employment. It is the sum total of all these things that spells malnutrition in the mass, and produce the startling differences in the health, disease, life and death rates between depressed congested areas and healthy suburban areas.

Remedies are obvious. Measures of emigration, ample holidays at the country sea-side, increased employment, higher wages, physical culture collated with education as to simple food values, the right agricultural products in plenty including fish and milk, more available skilled preventive treatment commencing above all with the anti-natal mother. These things are dependent on scientific knowledge, time, money and public opinion, the facts are well known, tabulated, recognised and labelled as economic problems. The only real problem is how to obtain them rapidly enough. Vast progress has and is being made but is it sufficiently fast to save the undermining conditions of physical and moral well-being of millions of our country-men.

Will lack of Sleep bring Mal-nutrition in Children?

Medical men are pointing out, of late, that lack of sound sleep is a big factor in the poor development of children and the sub-normal condition known as "mal-nutrition."

Dr. Duncan Forbes of Brighton is of opinion that lack of sufficient sleep is

an important factor in the poor development.

Modern environments especially in the young, tend to a sacrifice in the hours of sleep; and too often, summer time is given as an excuse. The child will not sleep while it is light.

Parents, however, should at any rate, make an endeavour to ensure that the growing child goes early to bed which would provide rest both to the body and brain. If a child is short of sleep, his nervous system becomes tired and fails to do its work properly, as its work includes the control and regulation of all the other systems in the body. Those other systems suffer also and the child has symptoms which may appear to the parent to have nothing to do with their real cause—lack of rest. The digestive system is earliest to suffer. Appetite and digestion which are regulated by nervous impulses fail and in due course, the child shows signs of under-nourishment.

It is no use of drugging such a child with tonics and tempting food. What is required is sufficient sleep to enable its nervous system to work properly.

A child of 8 needs at least 11 hours at bed and a child of 11 years at least 10 hours at bed.

Dr. W. M. Ash of Derbyshire found out that mal-nutrition is very often associated with late hours on the part of the children he examined and this lack of sleep adversely affect their physical condition.

It is a lamentable state of affairs that parents should be condoning late hours for their children and injure their growing bodies. The question of children's sleep is not within the active control of the school staff; but opportunity is taken to impress upon the parents the value of adequate rest for growing children.

—"Better Health," August 1937.

THE FOUR FUNDAMENTALS to LONG LIFE and IMMUNITY from DISEASE.

1. **Diet:** Mineral elements of life in correct combination produces metabolic equilibrium—living fuel.
2. **Bathing:** Inducing skin excretion, pore elasticity and perspiration.
3. **Exercise:** Prevention of muscular waste, Flabbiness and inhibition of nerve power.
4. **Thought:** Vehicle of cell influence, suggestion of constructive habits—impressions via five senses.

What is Small-pox?

Small-pox is one of the most loathsome diseases. It brings on disfigurement and disablement of the body. It leaves many blind or permanently pitted or scarred. It often kills many.

When and Who Discovered how to fight this Disease?

A century ago, Dr. Edward Jenner discovered how to fight this disease. He observed people who worked around cattle became infected with cow-pox, a mild form of Small-pox found in cattle and

then protected from Small-pox. This knowledge resulted the making of an anti-toxin that has saved many thousands of people from this dreaded disease.

What is Vaccination? How it helps to save you from an attack of Small-pox?

First the germs of cow-pox are grown in a healthy calf with the greatest attention to cleanliness. Scratches are made on the skin of the calf and in those scratches, cow-pox germs are rubbed. These grow feebly in the calf, producing cow-pox. Some of the weakened germs are removed in blood taken from the calf and are placed in small glass tubes for safe keeping.

Doctor makes a light scratch in the skin (on the arm) of a person and rubs on it some of the vaccine from one of the glass

tubes. In a few days, the scratch becomes red, indicating that the person's blood is making anti-toxin against cow-pox toxins produced by the cow-pox germs. This anti-toxin is stored up in excess and protects against small-pox. In about a week, the scratch has formed a small round sore that gradually heals and dries up. The small-pox protection remains in the person's blood for many years, ready to combat any small-pox germ that may break it.

—HEALTH PROPAGANDA BOARD, MADRAS.

Care of the Mother

DO YOU KNOW THAT Something like 2,00,000 or more maternal deaths occur yearly in India connected with child-birth?

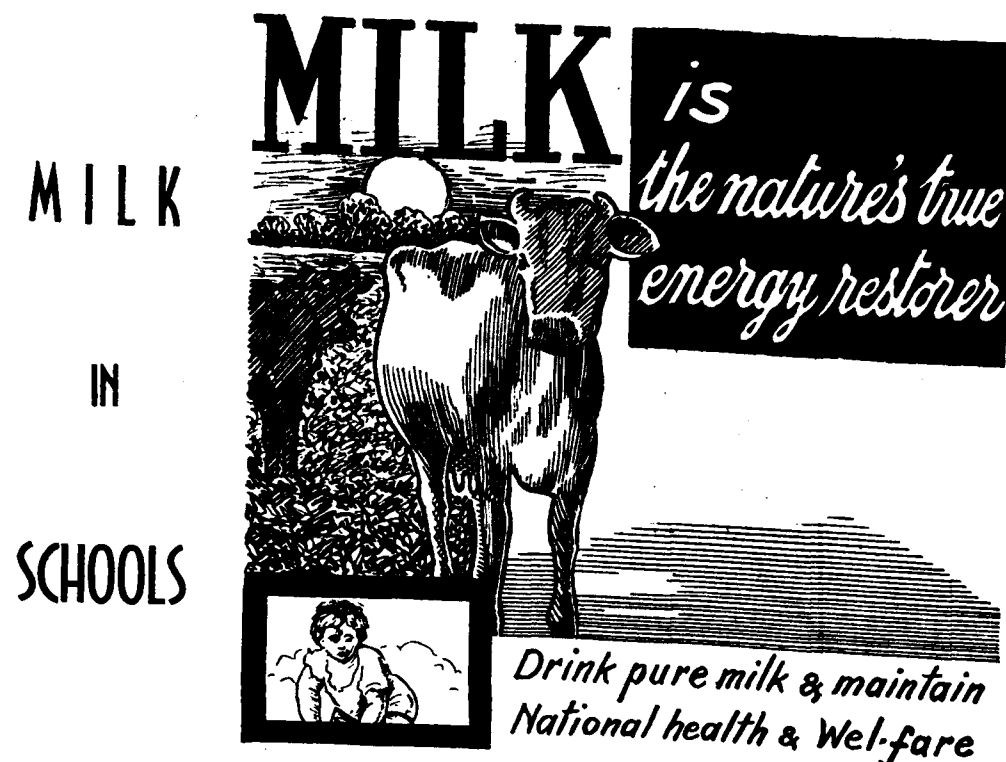
It has been found by careful study that possibly more than half of all the mothers who die in child-birth in India, could be saved by the provision of good care from the beginning of pregnancy until 2 months after the baby is born.

The following are some of the points comprising the care which every mother should have:

1. A thorough medical examination early in pregnancy.
2. Care of the teeth.
3. Medical and nursing supervision and necessary instruction throughout pregnancy.
4. Keeping the mind always cheerful. Paying attention to any problem that may affect the mother or the baby or may disturb their peace of mind.
5. Cleanliness during delivery under the supervision and assistance of medical service.
6. Medical advice and supervision after delivery until the mother is able to resume her usual activities and to carry on the additional responsibilities of the new baby.
7. Examination and treatment whenever necessary for a period of 3 months after delivery.

Public must realise that death may be the penalty for neglecting some of the above principles regarding maternal care. Expectant mothers and fathers should know what care they could expect from the doctor, their nurse and the hospital.

—HEALTH PROPAGANDA BOARD, MADRAS.



DIET is of greatest importance in infancy and early childhood. Milk is the crux of the problem. "Better balanced system of agriculture was the only feasible way in which greater and cheaper supply of milk could be secured." "Better nutrition of the masses." "Increase the present consumption of milk". These are some of the views which one could gather from the proceedings of the Indian Science Congress held at Hyderabad, Deccan, on January 4 of 1937. Dr. G. Sankaran of the Nutritional Research Laboratories, Coonoor, in the course of his recent lectures on "Nutrition of Infants" at Madras, impressed on the authorities concerned the appalling state of infant nutrition in their respective spheres.

Numerous experiments have established the fact that a daily issue of milk to undernourished children brings about a material increase of all the factors conducing to their physical well-being, vigour and alertness. Addition of four pints of milk, roughly 4 tea-cups a day, to a diet which, by itself satisfied the appetite of growing boys fed upon it, could convert an average annual gain of a weight of 3.85 lbs. per boy into one of 6.95 lbs. and an amount in the increase of height from 1.84 inches to 2.63 inches. The unmistakable betterment in nutrition was proved by trial to be due to the specific quality of the milk as food.

The general concensus of opinion upon the value of milk as a food for young children is so strong that it should be included in every case in the diet of children in order to maintain health and normal growth.

Milk is the nature's true energy restorer. Time should not be lost in putting into some practical shape the immense benefits of pure milk which would help a good deal to overcome malnutrition in child population and render easy and feasible the progress of national health and welfare.

Period of childhood is a supreme one. It is the period of growth, of the making or marring of healthy and efficient race. Adequate nutrition is essential for physical and mental efficiency. This is of paramount importance in public health. Demands are made during this period of growth. Failure to meet the demands of childhood may be responsible for an enormous amount of ill-health and wasted educational efforts.

Malnutrition prevails supreme in Indian children. The causes are well known. Improper food, clothing, insanitary surrounding, congestion, etc., etc. The best way to overcome this deficiency disease is by supplying milk to children in schools especially elementary standards. As it is now, children are kept actually starving between 9 and 1 in the forenoon. In their eagerness to attend school they leave home as early as 8-30 and return late at 1-30, i.e., nearly 5 hours, they remain without food. Their hunger, cravings for food and other natural habits would be curbed by the surroundings and other influences—the teacher, the class-room, the songs, stories and the general

commotion, etc., and when the child returns home in the hot hours, it is dead tired; it cannot express its hunger; it gets easily irritated and angry and stubborn. Only intelligent parents understand the real trouble and at once feed the child. Now the child's face gets entirely changed. It gets cheerful and is ready to start for school in the afternoon.

This long interval of 5 hours remaining without food especially for young children in schools should be taken notice of by the authorities concerned and practical steps should be taken to supply milk to children at 11 a.m. in all elementary schools either free or at cost to be borne by the parents. The charges could be included in the fees regulations.

What kind of milk should be given to children is a question which the authorities should know beforehand. The highest grade of milk defined by the Ministry of Health in England is Tuberculin-tested milk. Children should have no other milk for their health's sake. The best milk is that which comes from healthy cows and is carefully guarded from contamination from the time when it is first produced until it reaches the consumer.

The most practical praiseworthy and at the same time preventive measure to combat malnutrition in Indian children would be to start forthwith the supply of pure milk to them. This is a matter of paramount importance to the public health authorities one of whose main functions is to safeguard and maintain at a high standard the National Health.

*"Milk is to your Body
What Coal is to a Locomotive."*

OUR CHILDREN IN THEIR TEENS

THE most profound physiological and psychological changes take place in our lives when we are in teens. And it is then that the wise counsel and practical guidance of a parent is needed most. Though in infancy and child-hood, physical energies are devoted to the development of body and brain, on reaching puberty in the teens, a new trend becomes manifest and Nature begins the work of establishing maturity in the boy and girl. The most helpful equipment of our children during these periods is the frank knowledge and proper understanding of what is taking place within their being.

Children appreciate the justice accorded to right and wrong; so also, the code of right living that governs sexual matters. The habits contracted in the teens influence life in later years. It is in the quiet purposeful unfoldment of Nature's wise provisions in matters of sex during the teens that our children can come into their more mature years.

The influence of endocrine glands on the physical and mental growth during this period is well known.

The change from the rhythm of growth to the rhythm of maturity is centred around the sex organs, especially the gonad glands, situated in the testes of the boy and the ovaries of the girl. It is on the care that is devoted

to them and the incidental changes of puberty that the physical health and mental efficiency of future years depend.

After all, sex is the bed-rock on which family life is founded and interpreted aright; it is the most holy aspect of life and not the sordid to-be-avoided topic as is so commonly held today.

Boys and girls require plenty of exercise during their teens. Swimming, Walking, Cricket, Tennis, Hockey and Football are all good.

Next comes the intake of food and raw materials, which have an important influence on their physique and future well-being. During this period, it is the health protective foods that are necessary. The most important foods are fresh fruits, vegetables, cereals, whole wheat bread, milk, nuts, olive oil, etc.

Every boy and girl in their teens should have a supplementary supply of iodine through their food. This could be given by a change into the sea-side. There is, for instance, more iodine in sea-side air than is found in inland air, and the country or out-of-door children will naturally secure more of this invaluable element than the children in towns.

—HEALTH PROPAGANDA BOARD,
MADRAS.

Fruit Juice Tonics



EAT PLENTY OF FRUITS

MAINTAIN HEALTH

DURING the long dark days of winter, with the demands upon our bodily resistance, it becomes increasingly important that we study how best to maintain our general standard of fitness. Among other things, this will certainly mean securing plenty of fresh air, exercise (we tend to stay indoors so much) and sleep, together with proper attention to our food habits.

Fresh fruits, with their valuable alkalinizing mineral salts and vitamins, become more scarce and more expensive as the winter progresses, and because of this economic fact, our winter-eating habits tend to veer over to the acid side.

Nowadays, however, the art of canning makes fruit juices available to us very inexpensively even though fresh fruits may be excessive in price. All would, therefore, do well to cultivate the habit of daily fruit drinks during the cold months of the year.

Tinned tomato juice, for example, is an excellent source of Vitamin C. This

vitamin is usually destroyed by cooking; but in the scientific process of canning the Vitamin C content is preserved.

Pineapple juice not only supplies the body with necessary mineral salts and vitamins, but it is a valuable appetizer and digestive agent. Many other canned fruit juices may also be obtained so that you can bring the changes in your fruit cocktail from day to day, if you wish.

To-day the value of including fruits in the diet for their health-giving and tonic effects is becoming increasingly emphasized by nutritionists the world over. And in no more appetizing way can these be taken than as a small glass of fruit juice just before a meal.

Speaking from personal experience, we would say, "For health and digestion's sake, develop the fruit-juice-before-meals habit."

—"Good Health."

Apple — Its Place In Diet

AS a food, it has no value; but as an attribute, as a blood-purifier and laxative, its mineral salts contain the secret of its health-giving properties. Its vegetable acids and aromatic qualities act as refrigerants and antiseptics.

It contains about eighty-five per cent water, thirteen per cent carbohydrates, and some mineral salts. These include potassium, sodium, phosphorus, and small amounts of calcium, magnesium, iron, sulphur, and silicon, all of which vary according to the soil on which the tree is grown. It also contains vitamins A, B and C. On account of its malic acid (about one per cent), it is an excellent antiseptic for the stomach and intestines.

Apple heads the list of fruits beloved by the people. It contains health-giving properties unassociated with all the other fruits. There are many varieties to suit people of all ages. It is the most durably valuable and the most practical, stimulating the life and activity of the brain by its immense endowment of phosphorus.

The freshly-expressed juice of the apple checks any tendency towards

acidosis, while it is a good and refreshing drink in feverish conditions. It is a cleanser of all poisons in the body and Nature's great laxative. It purifies the system by directly attacking the toxic or poisonous matter in the blood. As the cleansing element contained in the fruit is carried to the remotest part of the body, an indirect attack is also made upon poisons lying idle in the joints and muscles, the predisposing factor of rheumatism. The apple will assist towards the elimination of uric acid although, at first, it may arouse these poisons to fresh activity.

To obtain the full vitamin value, the apple should be eaten raw. Apple powder is being used successfully to cure dysenteric disorders. The fruit is one of the finest articles of diet for diabetics.

Be FRUITFUL

Fruit is the "Tonic-sol-fa"

In the scale of Health

Fruit removes tartar from Teeth

and tartar from the tongue



DO NOT SPIT

SPITTING on public roads, streets, lanes and other thoroughfares is very harmful to public health. Spit infection is one of the main causes responsible for this disease.

Spit usually contains disease germs which, when wet and dried, either stick on to the feet of the passers-by or get inhaled by them thus making them carriers of infectious diseases.

Tuberculosis is a dangerous disease that takes away many young and healthy lives in our

In the interest of Public Health can you not control this indecent, filthy and harmful habit and thus save the country from the havoc of dangerous diseases?

You will do this to-day. Determine that you will not spit on public roads.

—Health Propaganda Board.

Early Health Habits keep Health late in life

Does Tuberculosis Really Run in Families?

IT has been said that tuberculosis "runs in families." If by this is meant that the disease is inherited in the same manner that blue eyes or brown hair are, the concept is erroneous. But if it is meant merely that its frequent occurrence can coincidentally be noted in the members of a single family, then the statement is true. It runs in families because children catch the disease from an older member of the household.

Tuberculosis, like many other communicable diseases, is caused by a germ. If a few of these germs get into a healthy body no harm is done because the body fights back. But if one lives daily with a careless person who has the disease the danger is great. Kissing, coughing and spitting may be the means of spreading tuberculosis germs. In fact, anything which has touched the sick person's lips may have germs on it, and the opportunities for "lip contact" in a home are numerous:

The modern doctor, therefore, advises that every member of a family, in which there is or has been a case of tuberculosis should be examined. Often he discovers that one or more of the children already have the germs in their bodies; such children are usually at the edge of the danger zone and can be saved if they are protected against further infection.

Of course tuberculosis can also be brought into the home and transmitted to its members. The danger of getting tuberculosis from casual meeting with others is slight. Yet repeated contacts

with those who have the disease may be enough to overcome the resisting power of the body. In the workshop, the office, the lunch-room, there are such opportunities for close and repeated contact. Young people are often careless about avoiding close contact, and children don't know how to protect themselves.

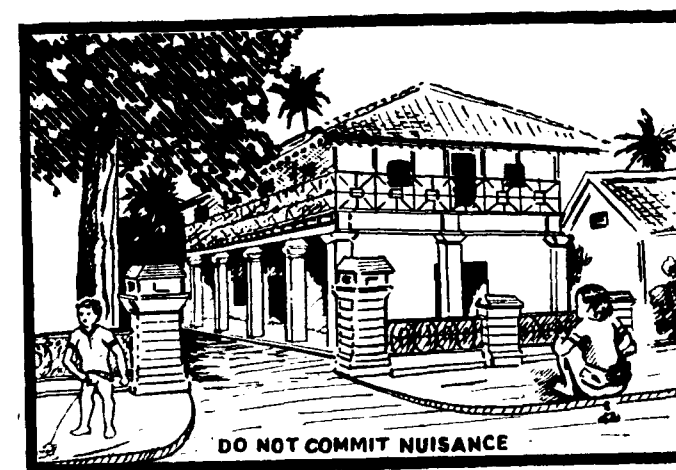
It may happen also that a single close contact with a person who has the disease is enough to cause serious infection. A visitor to the home, for example, who kisses the children may plant the seeds of this disease in that home. For this reason, then, no home is safe until all homes are safe.

—Hygeia, May 1937.

Tuberculin-Tested Milk

In a well-informed and closely reasoned report issued from the Agricultural Economics Research Institute of Oxford, Mr. R. N. Dixey attempts to answer the question of the unsatisfactory quality of the nation's milk supply. The choice for him lies between the production of milk from the tuberculin-tested herds and compulsory pasteurisation. Against the latter course he brings a number of arguments, the most important of which is that, in order to afford a completely effective safeguard against milk-borne disease, pasteurisation has to be carried out with a standard of exactitude more resembling that met with in a laboratory than in a commercial plant.

—Medical Bulletin, V. 5. 1937



DO NOT COMMIT NUISANCE

WHAT is Nuisance? Nuisance is anything that hurts, injures or causes discomfort to one or more of His Majesty's subjects. Excessive dirt, smoke, odour, dampness come under nuisance.

The above picture shows the most common and every day nuisance committed by our men and children on public roads.

This causes not only discomfort and disgust but renders the atmosphere foul and filthy thus paving the way for the spread of disease germs which grow in abundance in the faecal matter deposited on the public road.

Can you not do away with this nasty habit of committing nuisance on

public roads? Yes, you could easily stop this bad habit once for all. What is required is consciousness of one's own health. How to keep one's body and surroundings clean and tidy. It is Nature's law that one should be clean in habits, clean in mind and clean in action. This health-consciousness will work wonders to keep us free from diseases.

You will realize this, to-day, and make up your mind to keep your person and surroundings clean and healthy and also induce others to follow the example. "Do Not Commit Nuisance on Public Roads."

—Health Propaganda Board.

Good Habits are The Landmarks of Good-Breeding.

A Message from the Minister of Health

—KINGSLEY WOOD

MANY good things have their drawbacks, but there is no drawback whatever to good health.

We all like to be healthy and most of us would like to be healthier still. Still more do we want our children to be healthy.

We know now that we can do much by our own efforts to keep fit and become fitter. Such things as sensible feeding, plenty of fresh air and exercise, regular sleep and so on, have all got their parts to play. We know too, that many disabling forms of sickness, if taken in time, can be cured so as to leave no mark behind.

But it is not so long ago since a very different attitude prevailed. Sickness and premature death were accepted as the inevitable lot of a large proportion of infants born into the world. No one realised that dirty water or raw milk could convey typhoid to those who drank it; that tuberculosis is not an incurable disease, if taken in time; that a child's teeth may decay simply because it has not had enough milk. Even in Dickens' days a hospital was regarded chiefly as a dumping place for people who had no homes of their own to die in; how far removed from the function of our present hospitals, those great temples of healing and hope, with their skilled medical and nursing staff!

We have now a much more positive idea of health, and we are now much more able to promote it. That is—thanks to two things in particular—to advances in medical and scientific knowledge and to the means provided for the public to get the benefit of those advances for themselves.

That is, what the Health Services are for, which the State, the local authorities, and the many voluntary agencies, working in close and harmonious co-operation provide for those who need them. Advice through the centres and the health visitors, for the prospective and nursing mother, and a qualified midwife, with the help of the doctor where necessary, for confinements at home; free or cheap milk for mother and baby and, through the milk-in-schools scheme, for her children at school; hospitals, dispensaries, and sanatoria for tuberculosis and other disabling diseases; medical examination and treatment in the schools; playing-fields, swimming baths and other facilities for healthy exercise. Nor should we forget the medical attention available under the National Health Insurance Scheme.

These are only some of the Health Services, and this month and the five following months are to be devoted to a campaign with the single object of getting more people to use them. We want to see more prospective mothers

at the maternity centres, more school children drinking the milk that is so good for them and getting their decayed teeth stopped or their spectacles fitted, more young people coming to the tuberculosis dispensaries when there is still plenty of time to avert or cure the disease, more people of all ages taking outdoor exercise.

Many are doing these things already and know their value in building up health and preventing trouble later. To them I would say: "Tell your

friends and get them to follow your example."

Why is it necessary to have a campaign to get people to use the Health Service? I can only think it is because the services are not well enough known. I hope that our campaign this autumn, which has been so widely welcomed, will lead to a wide knowledge and fuller use of the Health Services. And then we shall have taken a long step forward towards a Fitter Britain. —"Better Health."

CROWDED HALLS AND INFECTIONS

Picture-houses may be regarded as potential sources of infection for all communicable diseases which are spread by droplet infection from the nose and throat, for example, diphtheria, scarlet fever, measles, whooping cough, influenza, colds and diseases of the respiratory system. They are centres at which people congregate close together for considerable periods of time, and any aggregation of individuals increases the risk of spreading disease. But picture-houses as such, are no more dangerous than any other places which reproduce these conditions such as theatres, music halls, schools and overcrowded trains and buses. The danger of infection arising out of the congregation of individuals may be lessened by setting up a minimum standard of floor space and ensuring adequate ventilation, measures which aim at diminishing the dose of infection. The risk will also be decreased by restricting the period of association. This implies consideration of continuous performances and the length of programmes.

J. M. LANG in "Better Health."

ATMOSPHERIC POLLUTION

Overcrowding and bad housing conditions are partly responsible for the prevalence of Bronchitis and Pneumonia and re-housing schemes should help to lower this rate; but bad hygiene, over-clothing and closed windows also play a large part and must continue to be fought by education.

The main cause, however, is the probable pollution of the atmosphere by soot and dirt.

During the last century, polluted water and contaminated food caused tremendous loss of life. Water and food are meticulously guarded, but the air we breathe which is as necessary to life, is continued to be polluted.

**Most Infections Are
Hand to Mouth Infections**

**Fresh Air—Like
Salvation—Is Free**

Education of the body in Public Secondary or Preparatory School

NUTRITION is an important question which could be raised often. It is improbable that boys are supplied with insufficient quantity, but what is required is quality and the way in which it is cooked and served. Growing children need more sugar. Spacing of meals is important and fresh air. Impact of air in the skin is a real health-stimulant. Minimum clothing is required. Unhealthy overcrowding in schools should be avoided.

The main infections in schools were drop-let infections, spread by sniffing and coughing. Three feet sitting space would show great improvement.

Next comes the co-operation of the teacher and the doctor. The body being controlled by will, is capable of almost infinite varieties of development, especially during the plastic school age. The object of physical training in schools should be to maintain a balanced mind, body and soul and not to turn out figure-skaters. Head masters must first believe in the value of physical education. The school doctor must educate the Headmaster who in turn, will educate the boys and parents.

—"Lancet," January 1937.

Bad Nutrition

Malnutrition, in any case, is no mere matter of defective height and weight. It means literally "bad" nutrition, so that an overfat child may be as malnourished as an overthin one. It may arise, and most commonly does arise, from underfeeding, but it is just as liable to come from overfeeding, from the correct amount of ill-prepared food or from the correct amount of ill-chosen food. Again it may be adequately fed, but by reason of other factors such as insufficient sleep, or fresh air may be unable to utilise the food to the best advantage. Actual under-feeding, producing a condition of semi-starvation in a child is very rare, and the commonest food deficiency is not of quantity but of quality.

—Better Health, July 1937.

Health Propaganda Board, Madras.

(REGD.)

SERVICE BUREAU.

LIST OF LEAFLETS.

Feeding of Infants.

House Fly (Tamil & Eng.)

Nutrition.

Puerperal Sepsis.

Consumption.

Care of Pregnant Women.

Venereal Disease.

Drink More Milk.

Dirt.

Leprosy.

Breast-feeding.

Ear Diseases.

Health for All.

Dental Health.

Friendly brushes.

Care of Babies.

How Ramasamy Rears a Child

Tuberculosis.

—♦♦♦—

The above leaflets may be had on application to :—

The Health Propaganda Board,

PANTHEON GARDENS,

Egmore : : MADRAS.

Health Propaganda Board, Madras.

SERVICE BUREAU.

CLASSIFIED TABLE OF PUBLICATIONS.

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
Otto Mayo.	Book (Eng.)	Venereal Diseases and their Effects.
Julian S. Huxley.	"	Biology and Society.
H. E. Garle.	"	Legislative Theories Underlying Social Hygiene.
Kenneth Walker.	"	Preparation for Marriage.
The British Social Hygiene Council.	"	Sex Education and the Parent.
Tredgold.	"	Mental Deficiency in Relation to V. D.
Sir A. Newsholme.	"	The Moral Aspects of Social Hygiene
B. S. Hygiene Council.	"	A Mother's Talks with her Daughter regarding Life and Its Reproduction.
B. S. Hygiene Council.	"	A Father's Talks with his little Son regarding Life and Its Reproduction.
Sir J. A. Thomson.	"	Education and Social Hygiene.
B. S. H. C.	"	Social Hygiene and Biological Teaching.
The Association of Maternity and Child Welfare Centres, London.	"	To Husbands and Fathers.

H. P. Board Publications.—(contd.)

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
Beatrice Webb.	Book (Eng.)	The Teaching of Children as to the Reproduction of Life.
Dame Mary Scharlieb.	"	Venereal Diseases in Children and Adolescents.
M. Scharlieb and M.L. Rawlins.	"	An Outline of the Medical Treatment of Venereal Diseases in Women.
The Girl Guides Association, London.	"	The Transmission of Life.
Mothers Union.	"	Adolescence.
Church of England Advisory Board for Moral Welfare Work.	"	Life and How It is Passed on.
Ellice Hopkins.	"	The Story of Life.
Clare Goslett.	"	Things We must Tell our Girls.
Clare Goslett.	"	Simple Hints to Mothers of little Boys.
L. Bulley.	"	Sex Education.
	"	The Established points in Social Hygiene Education, 1905-1924
L. Bulley.	"	A Talk on Question of Sex.
J. H. Muirhead.	"	Integer Vitae: Notes on the Moral Aspect of the Sex Problem.
White Cross League, London.	"	The Moral Training of Children.
Douglas White.	"	An Open Letter to Young Men.
K. Wills.	"	What Fathers should Tell their Sons.

H. P. Board Publications.—(contd.)

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
Rao Bahadur Dr. A. Lakshmanaswamy Mudaliar, B.A., M.D.	Pamphlet (Eng.)	Maternity and Child Welfare.
Dr. Robert Donaldson, M.B., ch.B., D.T.M.	"	Leprosy and Its Control.
Capt. T. W. Barnard and Dr. J. Santhanakrishna Pillai, L.R.C.P.&S., L.R.F.P.S., D.M. R.E.	"	X-Ray and Radium.
Dr. W. Happer, M.R.C.P.E.	"	Syphilis.
Dr. W. Happer, M.R.C.P.E.	Pamphlet (Tamil)	Syphilis.
Lt.-Col. R. E. Wright, I.M.S.	Pamphlet (Eng.)	Blindness.
Lt.-Col. R. E. Wright, I.M.S.	Pamphlet (Tamil)	Blindness.
Lt.-Col. R. E. Wright, I.M.S.	Pamphlet (Telugu)	Blindness.
(1) Dr. David E. Baxter, M.B. ch. B. (2) Dr. J. Josiah Joseph, L.M.S.	Pamphlet (Eng.)	Leprosy.
Messrs. T.J. Hurley, M.R.C.V.S., D.V.S.M., I.V.S. and K. Kylasamier, G.B.V.C.	"	Veterinary Science and Public Health.

H. P. Board Publications.—(contd.)

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
(1) Dr. G. Stapleton, M.D., B.S., W.M.S.I., (2) Dr. Muthulakshmi Reddy, M.B.C.M., (3) Dr. A. Lakshmanaswamy Mudaliar, B.A., M.D.	Pamphlet (Eng.)	Child Welfare.
Dr. W. Happer, ch.B., M.R.C.P.	"	Social Hygiene.
(1) Dr. L. S. Ramachandran, M.B.B.S., B.S.Sc., D.T.M., (2) Dr. B. R. Hanumantha Rao, L.M.P., (3) Dr. C. Ramachandran, L.M.P., L.C.P.S., L.T.M., (4) Mr. O.R. Jayaram Naidu.	"	Rural Sanitation.
Dr. A. Thirumaliah, L.M.S., L.R.C.P., L.R.C.S., D.P.H.	"	Public Health Act.
(1) Dr. C. Frimodt Moller, M.B., ch.B., (2) Dr. K. Vasudeva Rao, M.D.	"	Tuberculosis.
Dr. T. Satakopan, M.D.	"	Malaria.
Mr. T.N.S. Raghavachari, B.A.	"	Health Education.
Rao Sahib Dr. S. Venkatasubba Rao, M.D., D.P.M.	"	Child Guidance.
	Leaflet (Eng.)	Feeding of Infants and Children.
	Leaflet (Tamil.)	Feeding of Infants and Children.
	Leaflet (Eng.)	Food and Nutrition
	"	Consumption
	"	Venereal Diseases
	Leaflet (Tamil.)	" "

H. P. Board Publications—(contd.)

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
Dr. (Mrs.) S. Muthulakshmi Reddy, M.B.C.M.	Leaflet (Eng.)	Penalty of Dirt is Disease.
	"	Breast Feeding.
	Leaflet (Tamil)	Breast Feeding.
	Poster	Venereal Diseases
	Picture	"Drink More Milk"
	Pamphlet	Health Maxims—Book-marks, 4 sorts.
	Leaflet (Tamil)	Comforters and Dummies
	"	How Ramaswamy rears "A" Child
	"	Health for All
	"	Puerperal Sepsis
	Poster (Eng.)	Blindness
	"	Blindness.
	Poster (Tamil)	Blindness.
	"	Blindness.
	"	Blindness.
	"	Blindness.
	Leaflet (Eng.)	Leprosy.
	"	Leprosy.

H. P. Board Publications.—(contd.)

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David E. Baxter, L.B., Ch. B.	Pamphlet (Eng.)	Early Diagnosis of Leprosy.
P. V. Cherian, M.B.B.S., F.R.C.S.	"	Ear Diseases in Childhood.
J. B. Chenoy, L.D.S., R.C.S.	"	Dental Health in School Children
Dr. (Mrs.) S. Muthulakshmi Reddy, M. B. & C. M.	Book (Eng.)	Proceedings of the 1st Provincial Health Conference (1931).
	"	Proceedings of the Conference of the Medical Inspectors of Schools (1932).
	Booklet (Tamil)	Care of Pregnant Women.
	Pamphlet (Tamil)	Health Maxims.
	Leaflet (Tamil)	Specimen Leaflet of Enamel Plates.
	Leaflet (Eng.)	"The House Fly"
	Pamphlet (Tamil)	"
Dr. G. V. James, M. D.	Pamphlet (Eng.)	The Health of Young Women in University Colleges.
	Poster (Telugu)	Blindness.
	"	Blindness
	"	Blindness
	"	Blindness
	"	Blindness

H. P. Board Publications.—(contd.)

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
Dr. (Mrs.) S. Muthulakshmi Reddy, M. B. C. M.	Pamphlet (Telugu.)	Puerperal Sepsis.
Dr. (Mrs.) S. Muthulakshmi Reddy, M. B. C. M.	"	Care of Pregnant Women.
	Plate (Tamil.)	Enamel plates, 18"x20", "Keep the Street Clean; Dirt is Disease".
	Plate (Telugu.)	" "
	Leaflet (Eng.)	"Dirt is Disease."
	"	"Consumption."
	Booklet (Tamil)	"Friendly Brushes"—A Health Play.
Dr. (Mrs.) S. Muthulakshmi Reddy, M. B. C. M.	"	Care of Babies
Dr. (Miss) H. M. Lazarus, F.R.C.S., W.M.S.I.	Pamphlet (Eng.)	The Training of Midwives.
Miss M. E. Raynor.	"	The Training of Health Visitors.
Dr. K. Koman Nayar, L.R. C.P. & S., D.O.M.S.	"	Nutritional Disorders of the Eye in Children.
(Dr. Miss) M. K. M. Alexander, M.B., Ch. B.	"	Diet of the Infant and Toddler.
(Miss) J. Comstock, B.A., B.E.	"	The Child in Nursery School.
Dr. (Mrs.) K. M. Perfect, M. B. Ch. B.	"	The Pre-school Child from the Medical Aspect.
Dr. S. Venkatasubba Rao, M.D.	"	Mental Aspect of the Child Welfare.
Dr. A. Lakshmanaswamy Mudaliar, M.D., F.C.O.G.	"	A National Maternity Service—Its Implications and Possibilities.

H. P. Board Publications.—(contd.)

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
Dr. (Mrs.) V. Chinnappa, M. B., B. S.	Pamphlet (Eng.)	Maternity and Child Welfare Schemes, Organisation and Administration.
Dr. (Mrs.) H. V. Kamalammal	"	Maternity and Child Welfare Work in the City.
Dr. M.B. Prabhu, M.D., M.R.C.P. (Edin.), M.M. (Lon.)	"	Maternity and Child Welfare.
Dr. U. D. Gopal Rao, L.M.P.	"	Maternity and Child Welfare with reference to Housing Conditions.
Dr. G. V. James, M.D.	"	Reminders to Care-takers of Pregnant Women.
J. B. Chenoy, L.D.S., R.C.S.	"	Dental Health in Pregnant Women.
Capt. S. Thambiah, M. C., M.R.C.P., D.T.M. & F.D.S.	"	Infantile Eczema
	Leaflet (Tamil)	"Dirt is disease."
	Chart (Tamil)	Tamil Translation on "Tuberculosis."
	Chart (Telugu)	Telugu Translation on "Tuberculosis."
	Book (Eng.)	Proceedings of the Conference on "Maternity and Child Welfare (1936)."

Copies are obtainable from :—

The Health Propaganda Board,**"Pantheon Gardens," Egmore, Madras.**

Protection Against Diphtheria

THE demand for immunisation is usually postponed until diphtheria has occurred in a school, but parents are gaining confidence in the treatment. It is only by continuous and systematic application of this method of protection to the children of each succeeding year that we can hope to reduce the incidence of this treacherous and often fatal disease. The best way and time to commence to immunise children is before they commence school. Diphtheria is particularly fatal to infants between the

ages of 2 and 5 years, and even if they may be *sheltered* against infection in the pre-school years the risk of infection is serious when they have to take their place in the school community. The methods employed are safe and reliable, but it is of the most importance that treatment should be given in the pre-school years and continued if necessary in the early years of school life.

DR. E. H. WALKER—"Better Health."

"Infection" by "Ignorance" spread.

Daily Exercises

However sound the teaching, however complete the apparatus or however keen the scholars, we cannot get full value from physical exercise unless it is applied in a thoroughly systematic fashion so as to ensure steady and continuous influence upon physical development. Unless the periods of exercise are so frequent that the effect of one lesson is not lost before the next one is taken, the effectiveness of the training is considerably diminished. Where head teachers have increased the number of days per week, covered

by exercise of some form, even though perhaps the length of some lessons has had to be reduced, they have been able to testify to the increased efficiency of the training as a whole. Natural growth and consistent good health demand that the child should have some form of exercise each day and it is an unnatural procedure to administer this exercise in large doses—often resulting in undue fatigue—or perhaps only two days per week.

BY MISS E. K. BROWN and
MR. P. R. MARSH—"Better Health."

An Hour of Exercise to Every Pound of Food,

Humors And Vapors

New Hospital Patient: "Say, Doctor, I asked that nurse to put a hot water bottle at my feet and she stuck up her nose and walked away."

Doctor: "What else could you expect? That was the head nurse."

Patient: "Oh, do they specialise that much? Then get me the foot nurse."

—Opportunity.

An old dame underwent an operation. When consciousness returned she was asked how she felt under chloroform. "Well," she said "It was beautiful—I thought I was in heaven—till I saw the doctor."

—Town Talk.

Doctor: I can cure your husband of talking in his sleep, if that's all you want.

Woman: "Couldn't you just give him something to make him talk more distinctly?"

—New York Post.

Doctor. "Humph! I can't quite diagnose your case, but I think it's drink."

Patient: "Oh, I see. Now look here, doctor, would you like me to come again when you're sober?"

—Oral Hygiene.

Doctor: "There goes the only woman I ever loved."

Nurse: "Why don't you marry her?"

Doctor: "I can't afford to. She is my best patient."

—Farm Journal.

The father was reading the school report which had just been handed to him by his hopeful son. His brow was wrathful as he read: "English, poor; French, weak; mathematics, fair"; and he gave a glance of disgust at the quaking lad. "Well, dad," said the son, "it is not as good as it might be, but have you seen that?" And he pointed to the next line, which read: "Health, excellent."

—American Boy.

Some Men are Born with Good Teeth; Some Men Preserve Their Teeth;
While others Have Artificial Teeth thrust upon them.

TO PREVENT ILL-HEALTH

IT is the duty of a public education authority not merely to apply the principles of the science and art of medicine to healing through medical inspection and correction of defects, but to direct and indirect prevention of disease, and to the constructive conservation of the natural defences of the child's body, while developing its mind, and so to encourage the creation of a way of life which will produce a strong and virile race. We must, while correcting defects and faulty habits of

living, emphasise the importance of fresh air, adequate rest, regulated exercise, cleanliness, personal and environmental, and the common sense supervision of the bodily functions. These are simple measures, yet attention to them can prevent much ill-health. Until they are adopted we cannot hope for sustained progress in public health.

—Dr. J. A. HARBISON, Dublin.

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"Physic" To Make You Better.

Where public libraries aim to educate,
hospital libraries aim to help persons get well.



DRINK AND DRIVING

Two or three ounces of whisky, which is a comparatively small quantity, have been shown by psychological tests to diminish attention and power of control, to reduce the capacity to learn, to affect adversely the reasoning powers and to affect the powers of making movements dependent upon rapid and accurate co-ordination.

The curious thing is that drivers of motor-cars often think that their powers are improved by taking alcohol, and that they are quicker in seeing what goes on around them and are more skilful and ready in the driving of their cars. That feeling is an illusion because it will always be found that the taking of alcohol affects the qualities which are necessary in the driving of motor-cars.

LOVAT FRASER, M. P.—"Good Health"

When "Temper" Goes Up, "Reason" Goes Down.

Self-control is Job-control.

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Printed at The Artisan Press, 17, General Patters Road, Mount Road, Madras.

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but

"HOW TO ACHIEVE IS A PROBLEM"

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THE HEALTH GUIDE

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Vol. I

No. 2

THE HEALTH PROPAGANDA BOARD, MADRAS

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YOUR CHILD'S HEALTH

WATCH

Character and Personality

Are inextricably bound up in the well-being of the Nervous System.

To meet the demands of Modern Life on the Nervous System, Precautions to ensure its maximum development must be taken at a very early age.

Damage to the Nervous System in Childhood will make or mar mind and character in later life.

HEALTH PROPAGANDA BOARD

PANTHEON ROAD
EGMORE, MADRAS

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IMPORTANT

All the manuscripts for publication, books for review, Exchange of Journals and other correspondence relating to the Editorial Section should be sent to the MANAGING EDITOR, *Arogya Margam*, 57, Thambu Chetty Street, Madras.

Original articles are accepted with the express understanding that they are contributed solely to this journal. All matters published in *Arogya Margam* is copyrighted.

The manuscripts must be typewritten, and double spaced, and the original copy should be submitted. Blocks for illustrations will be supplied by us if the original illustrations are sent.

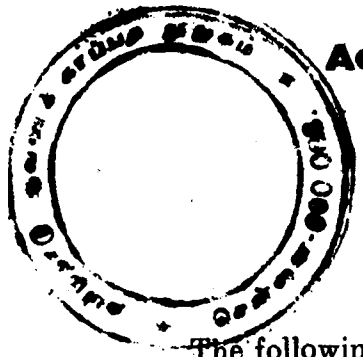
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Complete copy, instructions and blocks must reach this office not later than the 5th of every month in which the advertisement is to appear. It is understood that the old text (running) is to be printed, if no new copies of advertisement reach this office a month previous to the date of publication of *Arogya Margam*.

HEALTH PROPAGANDA BOARD, MADRAS.



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FOREWORD

Activities carried out in the field of Public Health Education by voluntary associations are of considerable value for the furtherance of Public Health and will be useful and necessary adjuncts to the work carried out by the Public Health Department. There is no doubt that better progress can be made in the advancement of Public Health and the activities undertaken can be rendered more effective if the official agencies are supplemented by a large number of voluntary organisations similar to the Madras Health Propaganda Board throughout the Province. The great preponderance of Public Health work is still in the hands of Governmental agency and must continue to be so; but at the same time, the work of voluntary associations has contributed to the awakening of the public to the realities and importance of health. Environmental hygiene has made great strides, but the personal and communal health has not received sufficient fillip and it behoves all agencies both Governmental and voluntary to direct their attention to the latter. Here is the field 'par excellence' for voluntary workers whose influence cannot but have a beneficial effect. Constant and continuous propaganda is an essential which is not lost sight of even in countries more advanced than ours and it is therefore an activity which should always remain in the fore-front.

A great many of voluntary agencies like the Health Propaganda Board are fortunate in having doctors as members whose technical knowledge cannot but have an abiding effect on such ventures and also help in rousing the public to adopt measures for the eradication of preventable disease and in developing a "health conscience". The family doctor plays as great a part in promoting Public Health as the members of the Public Health Department in that the former has the advantage of coming into contact with parents, infants, toddlers and grown-up children in virtue of his position and is therefore in a position to diagnose their physical or other defectives in time and apply or advise the necessary corrective. In drawing attention to this aspect, the object is to make the Health-workers and Doctors feel that they are inter-dependent and cannot move in water-tight compartments.

It is needless to point out that the work of any association is doomed to failure unless it reaches the rural population, whose improvement in matter of health must be the first plank in any health scheme.

2. The objects of the Madras Health Propaganda Board being the stimulation and promotion of interest in, and knowledge of, all matters connected with the general and personal health of the population of Southern India, the journal "AROGYA MARGAM" which the Board proposes to publish will, it is felt, be a medium through which the Board can aim to reach the general public in every part of the province. In publishing the journal, there is no doubt that the Board has taken a step in the right direction.

The number of popular Health journals published now in Southern India is very few. I hope the endeavour of the Madras Health Propaganda Board in bringing out a monthly journal of the type of "AROGYA MARGAM" will serve a very useful purpose in placing before the public facts and figures of the recent advances made in Public Health and preventive medicine will be welcomed by the public.

3. The journal "AROGYA MARGAM" appears to be comprehensive and I congratulate the Health Propaganda Board on their venture and I should like to suggest, if I may, that an effort should be made to publish the journal in all the languages of the province. It is perhaps too early to expect the Board to incur expenditure on this scale, but I trust that it will be borne in mind and given effect to when experience and financial considerations permit of expansion their laudable endeavour.

C. M. GANAPATHY,

Lieut. Col., I.M.S.,

Director of Public Health, Madras.

6th April, 1938.

The

Avoidable

Malnutrition

MALNUTRITION and under-nutrition among the poor is probably unavoidable, because their economic position is so miserably low that in this country of low standards of earning and living it will, perhaps, take some decades to effect a reasonable improvement in this direction. In fact, this is a tangled problem in which both politics and trade are involved, and we know that Indian conditions are in the melting pot to-day.

But malnutrition of the middle and upper classes is certainly avoidable. They suffer more from the effects of over-feeding than from under-feeding. Yet, malnutrition is as common among them as in the poor. The reason is not the want of where-withal to feed themselves sufficiently but ignorance of dietetic values and of proper methods of cooking and taking of food.

Mere satisfaction of calorie requirements is not enough to maintain the optimum health of an individual. The days when we were talking about the diet in terms of fat, protein and carbohydrate are gone, and modern research has revealed that, besides these essential principles of food, something more is necessary to keep an individual in a continuous state of good health. This "something" now goes by the general name of vitamins. The absence of these vitamins in our food causes certain types of deficiency-states. Not only do they cause what are called deficiency-states or diseases, they also lower the normal resistance-power of the individual and thus expose him to any kind of infection. Common cold is an expression of the lowered resistance of an individual. More serious than this is the susceptibility to tuberculosis, pneumonia and diphtheria—in

fact there is no disease in which lowered resistance does not play an important part.

Thus a balanced-diet, by which we mean not only a proper proportion of the proximate principles of food but also optimum quantities of vitamins, would conduce to maintain a standard health. Any deviation from this balanced-diet would mean either the development of a specific deficiency disease owing to the absence of a particular vitamin or of any general disease like tuberculosis, typhoid or pneumonia owing to the lowering or the absence of powers of resistance.

The immediate work, therefore, of the Nutrition Workers in this province, as elsewhere in India, is to carry an intensive propaganda regarding the balanced-diet among the upper and middle classes, who, inspite of their fairly high economic standard, are yet suffering from various types and degrees of malnutrition. As we have mentioned elsewhere, this is due to their ignorance and it is not difficult to dispel this ignorance because most of them are literate. We have only to correct their "angle of vision."

In this connection we would like to direct the attention of the Nutrition and Public Health Workers in this province, and also our readers, to the excellent bulletin on "Nutritive Value of Indian foods and the planning of satisfactory diets" by Dr. W. R.

Aykroyd of the Coonoco Nutrition Research Laboratories. It is a book which ought to be read by all and even taught to boys in the schools and colleges in this province. We do not know whether it is translated into the provincial vernaculars; if not, we would earnestly appeal to the present ministry of health to have it translated and distributed at cost price to the upper and middle classes of this province.

We are very optimistic in our belief that the malnutrition of this class of people can be avoided because it is avoidable. And if it is not avoided, it would be due to want or absence of a message rather than to the paucity or the absence of hearers of this message of hope and reform in their dietetic principles, methods and habits. While a wholesale dietetic reforms among the common masses of India is a question which may easily take a generation to develop and solve, the question of correcting the malnutrition of the middle and upper classes is, we hold, of immediate practical importance, because it is easy of achievement. And it is easy of achievement because this problem is not so closely intermingled with political and economic issues as the problem of the economic uplift of the poor millions of this land is.

We will be adverting again on this subject in our next issue to discuss the causes and types of avoidable malnutrition among the upper and middle classes.



Nutrition Value of Bananas

RECENT researches about the nutrition value of fruits have revealed that Bananas, the most common fruit, easily and conveniently available in large quantity in every nook and corner of India, are a useful food, rich in calories (a quiet source of energy, and a good source of the so-called funda-

mentals of diet—the Vitamins). They contain minerals which would help to build blood-forming elements and in general, Bananas increase the acidity of the bowels especially in removing constipation and help the retention of calcium, the bone-forming element in the body.

The following analysis would help us to judge the nutritive value of this popular fruit:-

Bananas contain:

Moisture	... 75.3 %	Crude Fibre	... 0.6 %
Ash	... 0.8 %	Reducing Sugar	... 7.1 %
Fat	... 0.6 %	Non-reducing Sugar	... 11.1 %
Protein	... 1.3 %	Starch	... 3.2 %

Bananas also contain appreciable amount of calcium, magnesium, phosphorus and copper.

It is the Reducing and Non-reducing Sugar percentage that gets rapidly absorbed in the system and act as a fruitful source of energy. Its alkaline reaction corrects acidosis caused by acid and citrous fruits.

Bananas are excellent sources of Vitamins A, B, C, & G. and build blood and bone-forming elements in the body.

Never forget to miss your plantain fruits in your breakfast and dinner.

All our children are very fond of this fruit. You are now able to realise by the scientific knowledge above why they are so very fond? By nature the period of childhood is the period of growth and development but it is natural for them to like foods which would help to build up the body and increase energy. Bananas do contain in sufficient quantity of blood and bone-forming elements and energy producing-qualities. So this is all the more reason why you should give children good bananas to satisfy their natural thirst for growth and development.

The Nutritive Value of Different Types of Milk

THE proof of the pudding is in the eating, and a definite answer as to the relative merits in human nutrition of various types of milk can only be obtained after elaborate observations and experiments on human beings. The work of recent years has shown, however, that much valuable information on the nutritive properties of various foods can be obtained in laboratory experiments on animals and also by certain physical and chemical tests.

Cow's milk is certainly the most nearly perfect single food available, but it is no more a natural food for the human than other animal and vegetable products which form our dietary. Natural normal milk passes from mother to offspring directly and almost sterile. But in the case of cow's milk there is often a considerable gap between the time it leaves the udder and the time it reaches the consumer. For this and other reasons a large part of the milk

consumed in civilized countries has to be subjected to heat treatment, and it is a matter of great importance to know whether or not the heating of milk affects appreciably its nutritive value.

Before discussing this point it should be made clear that milk is not a constant product, but that the season of the year and the breed and nutrition of the cow have a definite effect on its composition and nutritive properties. It is well known, for example, that summer milk produced on pasture is richer in Vitamins A and D than winter milk from stall-fed cows, that the milk of the Channel Island breeds is richer in fat, and therefore in calories and in the fat soluble vitamins than milk of other breeds. It is obvious therefore that when the effect of certain treatments on milk is studied, care must be taken to compare the same milk before and after the treatment.

Of the heated milks, pasteurised milk is the most common. It has often been stated that pasteurisation seriously diminishes the nutritive value of milk. Recent work carried out under carefully controlled conditions in several laboratories, has shown that, when pasteurisation is properly carried out, the heated product is only very slightly inferior to the raw milk of the same bulk. The chief effect, as far as can be judged in laboratory experiments, seems to be the destruction of some 20 per cent of the Vitamin C originally present in the milk. This is not a serious loss when one remembers that cow's milk when given to infants and children must in any case be supplemented by more potent sources of Vitamin C, such as orange juice, fruit and fresh vegetables. Incidentally, we may note that Vitamin C in milk is easily destroyed by light and that bottles of milk should not unnecessarily be left standing in bright light. Another vitamin, Vitamin B-I, also suffers some loss in the course of pasteurisation, and while an exact figure is not available it is doubtful whether the destruction exceeds 10 per cent.

No other nutritional factors present in milk seem to suffer a loss in the course of pasteurisation. Vitamin A and its precursor carotene are unchanged. Likewise, the biological value of the proteins, *i.e.*, their availability for the building or repair of the body tissues, and the advisability of the calcium and phosphorous salts are not affected. It has been often stated that unidentified nutritionally important factors are destroyed by pasteurisation, but we have been unable in our laboratory to find anything to support this view.

In certain parts of the country, and especially in large cities sterilised milk is sold in increasing amounts. Such milk, which is heated for some time

above the boiling point of water, obviously undergoes more severe treatment than pasteurised milk, and the nutritional losses are more pronounced. Of the Vitamin C originally present only some 50 per cent survives. Vitamin B-1 loses one-third, but vitamin B-2 is unaffected, as are Vitamin A and carotene. The heat of sterilisation is sufficiently high to lower the biological value of the proteins by some 6%. We have no information with regard to the effects of sterilisation, on the calcium and phosphorus salts of milk, but they are unlikely to be seriously affected.

With regard to the relative nutritive value of different grades of milk, such as tuberculin tested (certified), accredited, etc., there is no evidence that they would be markedly different when derived from cows of the same breed under similar conditions of feeding and differing only in bacterial counts and presence or absence of pathogenic organisms. Obviously the highest grades of milk would have the advantage that under certain conditions they might be consumed raw, while other grades might be unfit for consumption unless properly heated.

The composition of the milk secreted by cows suffering from mastitis is abnormal, and its nutritive value is lowered.

When weighing up the effects of heat treatment on the nutritive value of milk we should remember that the nutritional difference between winter and summer milk is probably greater than that between raw and pasteurised milk. It is unfortunate that in winter and early spring the increased demands of the growing infant and child for certain dietary factors should coincide with the lowest ebb of these substances in cow's milk. It is possible to produce by suitable feeding of the cows winter milk approximating to summer milk in its

nutritional qualities, and efforts in this direction should not be spared.

Cow's milk is not suited to form for any length of time an exclusive diet for human beings, and while all modern research has proved the immense value of adequate milk in our dietary, there is no satisfactory evidence that raw milk in a mixed diet is superior either to milk which has been boiled for a short time or to pasteurised milk.

In districts where sterilised milk is popular there is a tendency among mothers to use it in infant feeding. This practice should not be encouraged.

The consumption of milk in this country is still very low, and it is of the utmost importance for the health of the rising generation that its intake, especially by children and adolescents, should be markedly increased. The deficiency in this respect is at present so severe that, provided more milk is taken and the milk is clean and hygienically safe, small differences in the nutritive value of various types of milk are for the time being of secondary importance.

—Mother and Child.

The Child's Mid-Day Meal

The best sandwich meal cannot make as good a mid-day meal for a growing child as a well cooked home or school meal of meat and vegetables and pudding. The mid-day meal should be the principal meal of a child's day. To have a make-shift meal in the middle of the day and make up by a heavier meal at night is satisfactory for older people, but for a growing child it may cause interference with sleep and digestion, and put too great strain on the energies which should be given to the hours of schooling. Particularly any child who is anæmic, under-developed or otherwise in poor health should have a cooked meal every day. Strong well-grown children can take a sandwich meal several days a week without harm, if a thoroughly good meal is provided. This should contain sufficient protein food (meat, fish, egg, cheese), vitamin food (fruit) something sweet and a hot drink should be taken with it.

—Dr. C. L. CORBETT, Assistant, M.O.H., (LANCS).

BREAST-FEEDING

“What The Child Is, The Man Will Be”

There is no perfect Substitute for Breast-Feeding.

How instinctively a hungry baby turns to its mother for proper nourishment. What freedom from nutritional disturbances it enjoys. How sturdily it grows. Breast milk satisfies every need of its body, for the milk of the baby's own mother is the food that Nature intended that the baby should have and no artificial food has ever equalled it.

Better than any commercial product, breast-feeding supplies the essentials of baby-growth. Nine out of ten mothers can give their babies this start in life, if they will. They should look upon breast-feeding, not as an inconvenience or duty, but as a glorious privilege and their babies' birth-right.

If you are unable to supply sufficient breast milk for your baby, the one best food for complemental feeding is cow's milk properly modified to the baby's individual needs. The decision to give complemental or artificial feedings is so important that only your physician should make it. He knows that there are no standard babies . . . that there can be no standard formulas for modifying Cow's milk.

Unless utmost care is used, the result may be a whole train of nutritional disorders . . . such as poor teeth, deformed bones, and weakened resistance to infections. Frequently these results of mal-nutrition do not manifest themselves for months or even years—but they are none the less serious.

As you love your baby . . . as you want it to grow strong, give it the benefit of breast-feeding as long as possible.

—Health Propaganda Board, Madras.

HEALTH HINTS

The child should feel that in his home he may think and speak confidently about worth-while subjects, for it is there that his life attitudes and tolerances are usually formed.

Through leisure activities one is able to recreate energy and build up mental and physical health, both of which are essentials to happiness as well as to life itself.

—Hygeia, May 1937

The parent who refuses to allow his child to have a correctible deformity corrected is guilty of gross and inhuman neglect.

A strong Body is Above Infinite Wealth.

Don't Look Outside for the Cause of Your Happiness—Look Within.

Living Does Not Consist in length of days, but in the full Use of Time.

It Takes 60 Muscles of The Face to produce a FROWN, and Only 13 to produce A SMILE. Don't Worry, and Why Waste Your Energy.

Laugh and The World Laughs with You—Weep and You Weep Alone.

A Laugh is Worth A Hundred Groans in any Market.

The Best Sauce in The World is Hunger, and as that is never Wanting to The Poor. They Always Eat with A Relish.

Every Deep Breath is A Tonic Bath.

Home—The Place where We Grumble The most and Get treated The Best.

Aspiration leads To Inspiration, and Inspiration to Illumination.

What is Health

Education?

“WE are becoming so accustomed to having our lives furnished for us that our initiative is in danger of slipping away,” said Dr. Alister Mackenzie, during the course of an address on “Health Education” at the recent conference of the Scottish National Health Visitor's Association.

Under modern conditions, said Dr. Mackenzie, people crowded into the towns, where they were spurred by an indefinite restlessness and assailed by noise. Civilisation had increased, so that probably no one appreciated what his neighbour did.

“Foods fresh from the tin adorn our tables,” he said, “We take exercise by going on a tram, bus, or in a car, to watch our favourite team win its game. The press gives us our views on affairs. The cinema is our emotional outlet. We cannot even amuse ourselves. We have to be amused.

“Should modern life be adapted to man, or should man adapt himself to modern conditions?

“I think the answer must be that while the community should see to it that housing conditions, working conditions, and the like are favourable—at least, that they are free from the risks of physical, mental and moral deterioration—yet man must be prepared to

take active steps to adapt himself to the world as it is. He should take steps to make and keep his body, mind, and spirit fit in spite of civilisation; fit for work and leisure fit for fellowship.

“There is a real danger that when modern civilisation comes in at the door much that is desirable can fly out by the window.”

Dr. Mackenzie said that a large section of the population was ignorant of recent discoveries about food and health, the power of sunlight, the value of exercise for mind and body, the need for adequate sleep and relaxation under restful conditions, the advantage of loose-fitting, light weight clothing, and foot-wear which did not deform the feet.

Health education meant more than the absence of disease. It was something active, potent, dynamic.

It involved body, mind, and feeling. It depended upon heredity, environment, and behaviour. Health education was an attempt to develop in each individual habits, attitudes, knowledge, and ideals which would permit his physical, mental and emotional well-being in the community of which he was a member.

“Better Health,” 1937.

Place of India

on the

Health Map of the World

LET us see where we stand on the World's Health Map. The country is ridden with disease, poverty and ignorance, which are the three chief factors that act and interact to produce bad health. A glance at the condition of the other nations will show that this country is not only a slave country, but a sick nation as well. India leads in the nations of the world in the abnormally high death-rate, infant and maternal mortality rates, and the very low expectation of life at birth. The average span of life of the Indian is 23 years

whereas it is 54 in England and 58 in New Zealand. The infant mortality in India is so abnormal that in most Indian urban areas it may be said that for every four babies born, one dies by the end of the first year, and two by the end of the 5th year of life. Our population is halved by the time it reaches the 5th year of life. What a great loss of infant life and human energy! Let us concentrate our attention on the saving of our race at the young ages, the pre-school and the school child.

The following Statistics will convince anyone about these facts :—

FIGURES FOR 1932

COUNTRY.	Death-Rate.	Infant Mortality Rate.
India	21.6	169
England and Wales	12	65
New Zealand	8	31
U. S. A.	10.8	58
Australia	8.7	41

EXPECTATION OF LIFE AT BIRTH

Australia	57	France	48
Denmark	56	Germany	47
Norway	56	Italy	44
Sweden	55	Japan	43
America	51	India	23
England	51		

Physical Education

in Our Country

M. BAPINEEDU, B. SC. CORNELL, M. SC. (CALIFORNIA),
Parliamentary Secretary for Public Information, Madras.

WHAT is the importance given to sports and physical education in our country? In U.S.A, the National Education Association has defined its seven objectives of Education as follows in the order of their importance :

(1) Good Health (2) Good Citizenship (3) Good Character (4) Worthy use of leisure. (5) Worthy home membership. (6) Command of fundamental processes ; and (7) Vocation.

But in our country, the order is topsy-turvy. Co-Vocation is the prime consideration, and physical well-being of the student is sadly neglected. Very little importance is given to the health of the students. Physical instructors are in practice, mere ornaments, and very little percentage of the boys take part in games and sports. If the above objects of education are to be achieved all this must be changed. The health of the students should be made the primary concern of our system of education. Physical Education should be given equal if not greater importance as the vocational education. National Y. M. C. A. is conducting a college of physical education at Madras on practical and scientific lines. The good work deserves our attention and encouragement. Scout-training, in secondary schools, and military training in colleges must be made compulsory as they alone

create among boys, the idea of sound and responsible citizenship and lay the foundation for a future national militia. Medical examination of all students at the beginning of each term must be enforced. The necessity for the last suggestion is borne out by the results obtained of an examination conducted at the Saidapet School, which revealed the startling figure that out of 210 children examined, only 31 or 15 per cent were found to be healthy.

Dr. Rajan speaking at the Presidency College on "Physical Education" on the 19th October stated : " Medical Officer during the inspection of the Presidency College said that 309 students were examined by him ; 50 per cent not nourished, large number with weak hearts. " He said that there was tremendous degeneration during the last five decades. It may be said that they progressed intellectually ; if this process were to go on, a caricaturist would depict a student having merely a brain and no body.

The popular heroes of the colleges in Western Universities were not those who won prizes but those who did well in sports. Even in our country the best sportsmen are now-a-days favoured with best jobs and promotions. Health is a dynamic thing on passing

the examination. It is not freedom from disease. Health is essentially a human product and by observing the laws of Nature health can be acquired. My advice to you, therefore, is to take very active part in sports of all kinds, grow up into strong sturdy young men, broad in chest and tough in muscle. Play well, eat

well, live well and die well. Join the national scout organisation if you have already one, and start one if you have not. Unfortunately for our country, imparting of military training is not in our hands, and if it were, I would like to make it compulsory for every one to undergo it.

NATIONAL SPORTS

The next question is what kind of sports should we take part in. From a perusal of the rules and byelaws, I have noticed you are arranging only such sports as do not really cost much. We should bear in mind that ours is the poorest country, and any sports to be adopted on a mass scale should not cost much. Tennis-rackets costing Rs. 75/-, courts costing thousands to construct, can never be the sports for India. We must encourage our national sports such as *Chadugudu*, *Dundals*, *Baskis*, *Guridisamu*, *Uppa-baddi*, *Cross country running* and *Walking races* which cost nothing, but which give vigorous

exercise to the players. Exercises on the horizontal and parallel bars should also be practised. Training must be given in *Wrestling* and *Jujitsu*. Breathing exercises, *suryanamaskarams*, *Asanas*, and *Swimming* also, should be taught and must form part of physical training. Prizes should be given for perfect bodies which exhibit ideal developments of body and muscle and also for a healthy boy in the school. You may have also all the sports you outlined in your rules as they cost little. We should all press for more playgrounds and public parks which also are conducive to good health.

Value of Swimming.

Apart from its value from the life-saving standpoint swimming is one of the best available form of healthy exercise. In a short space of time it exercises every muscle in the body, causing deep breathing and an increased rate of metabolism. In addition, swimming is recognised to be a powerful educational factor for teaching cleanliness and self-respect. In order that these benefits and pleasures should be enjoyed to the fullest extent it is essential that the water in swimming pools should be of a high standard of quality.

Exercise and Recreation

Physical training must be encouraged. There are many who seek recreation by watching others at games, and mental relaxation is sought, in closely crowded indoor amusements. The speed of life which modern times require of us, and the fact that we work, travel and amuse ourselves in crowded conditions, must tend to increase mass infection and physical and mental ill-health. We cannot change our mode of life, thus we must continue to stress the need for open air exercise and sound nutrition.

—"Better Health."

THE EXCESS OR THE DEFECT IN MY WEIGHT

PEOPLE—women especially—have been known to become acutely self-conscious by reason of being much above or below the general normal for their sex, age and height.

Whilst allowing that extremes are always indicative of abnormality, one would stress the point that a person may differ quite an amount from the normal and yet be healthy, because each individual has a *personal* glandular constitution which largely determine height and weight.

One would also stress the evil of rapidly reducing weight by extreme restrictions in diet over prolonged periods and without medical supervision. To reduce weight slowly and safely it is usually sufficient to reduce butter, sugar and starchy food to a third of that previously taken—either by cutting them out entirely at one meal daily, or by having two fast days a week on which fruit water and tea (without milk or sugar) are alone taken.

To increase weight, the meals should be taken very slowly, followed by a rest, and should not be accompanied by reading or other mental stimulus. Every effort should be made to obtain physical and nervous relaxation. Meals should contain all the food essentials (proteins, fats, carbohydrates, vitamins, mineral salts) with excess of butter, cream and sugar.

In conclusion, let sufferers from the sense of social inferior remember that all the possible physical defects in the world can be overcome and disregarded if the individual possesses personal charm. Fortunately, charm does not depend upon facial and figure beauty, but is determined by the presence of an interested mind, interested manner, and a spirit which remembers the needs of the other persons.

Though the whole weight of the body is due to food eaten, it is an error to suppose that good food necessarily makes you fat and poor food makes you thin. An equally common error is that there are certain foods which are particularly liable to cause fat, though it is perfectly true that starvation will always reduce weight and that special feeding will turn lean stock into fat. There is for each of us a best weight if he is well fed. Bad feeding is more likely to increase weight if the *quantity* of food is not insufficient for the depositing of fat is one sign of faulty nutrition. A badly fed fat person will lose weight from good feeding. Fat stock is diseased stock, for their fatness is brought about by ill-feeding for a set purpose, namely to produce fatty degeneration and infiltration of the muscles to make the meat more tender and of better flavour. The best beast fattened for market is no good for anything but slaughter.

—"Better Health" 1937.

SPORTS AND SOCIAL LIFE



SPORTS go a very long way to build up a strong nation. They not only improve the physical condition of the boys but also transform them into good social beings. They impart in him a sense of discipline and fairplay or what we call sportsmanship. The disciplined life obtained in other countries where sports occupy a very important part in their lives, bears testimony to this fact. A most obvious example of this discipline is their way of obtaining tickets at railway stations. They all stand behind one another in the order of their arrival and the first come will be first served. This is very unlike the

jostling and pushing and elbowing we find in our stations and theatres which profit none but result in disorder.

It is only on account of this discipline that they are at the top of to-day in the world. This is also the secret of success of Japan, which was the first to adopt the best among the others. The spirit of equality and fellowship that is engendered among boys on the playground continues in after-life, and makes them useful members of democracy. Sports know no caste, creed or colour and contribute to national solidarity.

This is why sports are given such a prominent place in the scheme of life in European countries. In the United States of America, unless a student passes the physical fitness test and medical examination also, in addition to his academic qualification, he is not given a degree. Physical training and military training are made compulsory for the students. Regarding health of school children, all boys and girls in schools should first be taught hygienic principles and whether the pupil passed the examination or not, at the end of the 4th year, he should have complete knowledge of health and hygienic principles. Otherwise this cannot be imparted at the later age. Physical education like hygiene is equally valuable and instruction in physical culture should be imparted at an early age. The adults should be on the top of this, cultivate civic conscience and serve more and more the cause of public health of the town.

to one particular part of the body; the necessary co-ordination between brain and muscles-response is only acquired after long and careful practice and resourceful coaching.

Clothing for Physical Exercise.

For physical training in girls' schools, the most suitable costume is a blouse or jumper, knickers of some dark material, and gymnastic shoes. An important item of clothing which could be dispensed with is stockings. In the majority of cases, these are held in place by garters which are dangerous to the health of the child.

—Mr. H. A. LONIE,
Secretary for Education, ST. HELENS.

Co-ordinating Brain and Muscle.

Both time and energy are well spent in laying the foundation of a knowledge of modern requirements of physical training in elementary schools. "Movement is now indisputably the keynote of all physical training periods, and the next step is to raise the standard of this "movement". At present it is true that the children run, skip, jump, etc., but it is desired to go still further and see that with every lesson the running becomes lighter, the skipping more graceful and the jumps more full of spring. This beautifying of all movement calls for a strong mental effort as well as for a physical response to a signal: the child has to concentrate upon the careful control of its limbs and upon the localising of movement

How Teachers Help.

The School Service, and particularly its Dental Department, makes little head-way unless it possesses the goodwill and ready assistance of head and other teachers. It is my privilege to acknowledge again gratefully and sincerely all the help which has been given to my department by the teaching staffs. I am well aware that the School Medical Service imposes additional work on the teachers; more than this, I am well aware that apart from the routine work which the teachers do for the service there is a mass of entirely voluntary work done by them in the interest of their children. Best of all, I know that teachers do all things for the children cheerfully and willingly and without a thought of defined duties.

Noise and Public

Health—Its Control

NOISE has come to mean any sound that is undesired by the hearer, and its undesirability depends upon such factors as its intensity, quality and pitch, the background against which it is heard, and its environment, as well as upon the hearer's taste and state of mind, his health and his occupation at the moment. Estimation of the absolute noisiness of a given sound is therefore clearly impossible, and the most that can be done is to measure its loudness in relation to its background as heard by a normal ear. While agreeing that the composition of the sound has to be considered, Mr. G. W. Kaye, D. Sc., has come to the conclusion that "sheer loudness is the determining factor in most cases of annoyance caused by noise." This opinion, expressed in the presidential address to a section of the British Association early this month, may not be acceptable to psychologists; for they are apt to lay more emphasis on individual abnormal reactions than on stimuli. But there can be no question that a large proportion of people are more likely to be annoyed by big noises than by small ones; and where measurement is required, the problem, as he says, "largely resolves itself into the correlation of the sensation of noisiness (as assessed by the ear) with the associated energy, which can be quantitatively measured by physical instruments."

The human ear is sensitive to a range of oscillatory pressures from 0.001 dyne per square centimetre, below which no sound is heard, to 1,000 dynes, above which pain is felt in the ear. In order to cover this vast range a logarithmic scale of intensity is used, the unit being one "decibel", which represents a definite fractional step, 26 per cent, in sound energy, and is roughly the smallest change of intensity that the human ear can detect. The intensity of a sound, being a purely physical matter, can readily be measured by means of microphones, but loudness is a psychological concept, and its measurement must depend upon aural observations by human observers. The method employed is to adopt a standard noise and to vary its strength on a known scale of energy until it is judged to be as loud as the noise being tested. For this purpose a pure tone of frequency 1,000 cycles per second, about two octaves above middle C, has been chosen as the standard, and the zero has been placed near to the threshold of audibility of the 1,000 cycle tone. If a noise when tested is found to match the standard when the latter has an intensity of n "decibels above zero", the noise is said to have a relative loudness of n "phons". On this scale the human ear has a range of from 0 to 130 phons, a quiet whisper has a loudness of about 20 phons,

ordinary conversation 60 phons, and a pneumatic drill 100 phons. The adoption of this standard has made it possible to construct noise meters by which the equivalent loudness of any given noise can be read off on a scale, and these will very much simplify the devising and enforcement of legislation to suppress noises that exceed an agreed acceptable standard. Dr. A. H. Davis, of the National Physical Laboratory, in a recent addition to the "Changing World Library" gives an account of the progress which is being made both at the laboratory and by private firms in reducing, absorbing, or excluding noises of all kinds, and the non-technical reader will be delighted to learn from him how, with a certain financial outlay, he can attain quietness though his home is next door to a boiler factory.

A less hopeful outlook confronts those to whom not only the loudness of adventitious noises but music in any form constitutes an unpleasant and when prolonged, an almost unbearable

experience. The poetic tradition that they are, to say the least, untrustworthy neighbours, maligns them; they are usually patient if unhappy ones. Their number seems to be growing—or is it merely that now a days they dare to confess their aversion, braving alike the contempt of those whose trained appreciation of fine music is delicate without being fastidious, and those others who turn on the wireless as a routine on entering a dining room or even a library? The present cult of the gramophone by the young has one advantage over that of the pianoforte imposed on their predecessors—it requires no practice—and the tunes omitted from any one instrument are thus as a rule, but not always, more varied. But the production of what might be termed a negative acoustic is desirable to bring relief where it appears to be most needed by the occupants of flatlets, who have no control over the sounds inflicted upon their unwilling ears and have no other room.

—Extract from "LANCET."

INSUFFICIENT SLEEP

Insufficiency of Sleep is an important factor in causing subnormal nutrition. An adequate amount of sleep is necessary for all children, particularly so for those from homes where the income is barely sufficient for the domestic needs. None of the less it is a common experience to be informed by parents that their children visit the late performances of the cinema or sit up regularly to listen-in to the later items in the broad-cast programme. Evidence of this lack of sleep is figured in the faces and lax posture of such children in school.

How much Liquor Makes a man Drunk?



Is Moderate Drinking Harmful?

IN this remarkable age, with its high-powered machines in the air, on the highways, and in the factories, surely we have a right to demand that those who operate these machines have all their powers at the highest degree of efficiency, not only for their own protection but for the protection of the public. And it must be conceded by all that alcohol does much to interfere with men's efficiency and self-control.

The question arises: How much alcohol can a man drink and still maintain his normal efficiency? It has

been found by careful scientific investigation that the use of alcohol, even in small amounts, impairs both mental and physical efficiency.

"When the brain is under the depressant effects of alcohol," says Sir Vitor Horsley, "the drinker is not aware of it because his judgment and perception are clouded. He is deluded by the effects of the relaxation of his higher centres, and the consequent setting free of lower activities." He thinks he is working more easily and doing more and better work, when, in fact,

as demonstrated by precise tests; to be described later, efficiency, both mental and physical, is lessened, reaction time and reflexes are slowed down, keenness of vision is dulled, speed in typewriting and other forms of manual dexterity reduced, co-ordination impaired, errors increased, and memory weakened.

One of the properties of alcohol is that of a solvent. This property is made good use of in the laboratory and pharmacy. When taken into the human body, however, alcohol acts not only as a narcotic, but as a solvent it attacks the lymphoid, a fat-like substance that covers, or insulates, the nerve fibres and nerve cells. This produces a condition similar to the short-circuiting in an electric light system. Disorganization of our feelings and disturbances of the functions of seeing, hearing, and the co-ordination of movement then result.

As soon as alcohol begins to be absorbed in the blood, the effects resemble those of any of the anaesthetics, such as ether or chloroform, commonly used in surgery. First, the inhibitory influence of the highest centres of the brain is removed, resulting in the so-called excitation stage. Following this is the stage of inco-ordination with the upset of mental and muscular balance, confusion of the higher centres, and physical ataxia, or loss of the power to walk straight. Next, the individual gradually becomes oblivious to his surroundings, lapsing into an unstable state, until there is complete anaesthesia and entire loss of consciousness, and he is found in a state of coma. The question may be asked, in which one of those stages is the person really drunk?

There are various definitions of drunkenness. Dr. Purves-Stewart defines

it thus: "A drunken person is one who has taken alcohol in sufficient quantity to poison the central nervous system, producing a temporary disorder of the faculties so as to render him unable to execute the occupation in which he was engaged at the time, thereby causing danger to himself or to others."

The fact that the very highest centres of the brain are the first to be affected (as manifested in the blunting of the finer grades of judgment, observation, and attention, resulting in freedom or lack of care, and increased confidence in one's mental and physical powers) makes the individual who has been drinking a dangerous man to have control of a piece of machinery of any kind. The fact that he has increased confidence in his mental and physical powers, when there is an actual decrease of reflex action and reaction time, the loss of accuracy and muscular control, and loss of ability in mental operation, makes him especially dangerous at the wheel of a motor-car. He is drunk, and has no right to drive.

Alcohol is not acted upon by the gastric juice, but is quickly absorbed into the blood-stream, and is carried to every cell of the whole body, including the nervous system, and makes a complete circuit of the organs of the body in approximately thirty-seven seconds, so long as any remains in the system. It has been found that alcohol is absorbed so rapidly that within fifteen minutes after it has been taken into the stomach enough has been found in the blood to have a narcotizing effect upon the nerves.

The effect of alcohol upon the eyes is to narrow the vision. "A normal driver when looking ahead can see objects approaching from both sides. It was found that as much alcohol as

is in a glass or two of beer narrowed the eye span." Another effect upon the eyes is to shorten the distance of vision. "The normal eye can see distinctly about thirty-feet ahead. As much alcohol as is in a glass or two of beer was found to reduce distance as much as one-third. (Kraepelin and Reis.) Have you heard a driver say, "I did not think it was so close"?"

The ability to distinguish colour is interfered with. The drinker oft-times sees only a light instead of a definite colour, such as green or red. "Red and green lights are the signals for danger and safety. Alcohol equal to a glass or two of beer dimmed the perception of colours in many subjects; the red seemed less red, the green less green." (Schultz.)

"These effects of alcohol were commonly recognized before scientific tests were made." The American railroads years ago adopted 'Rule G,' which prohibited the employee from the use of intoxicating liquors while on duty, and gave notice that 'frequenting places where they are sold is sufficient cause for dismissal.'

The drinker's reaction time is slower. Reflex actions of the body are carried on normally in fractions of seconds. For example, it takes only a brief part of a second for an impulse to be carried from the eye over the sensory nerve paths to motor centres in the brain and back over motor nerve paths to the muscles of the arms and legs, bringing about co-ordinate and purposeful movements. With the nerves narcotized by alcohol, the length of time required for such a reflex act, or for the mind to register what the eye sees and send back a message to the arms or legs and bring about the necessary movement, may be greatly lengthened. The results

of such impairment are obvious and serious. "Under normal conditions it takes one-fifth second 'to put on the brake.' It was found that alcohol equal to a glass or two of beer may lengthen that time to two-fifths or even four-fifths of a second." (Kraepelin and Reis.) If a car is travelling sixty miles an hour, it will run nearly eighteen feet in one-fifth of a second.

Most drinkers say, "I use alcohol in moderation." In moderate drinkers the concentration of alcohol in the blood is usually found to be about one to two milligrammes in each cubic centimetre. It is in this stage of intoxication that the loss of self-consciousness, self-control, and weakening of the will power occurs, and there is evidence of marked impairment of muscular co-ordination. With alcohol taken in sufficient amounts to bring about a concentration of three milligrammes per centimetre stimulating symptoms begin to subside, and a stage of inco-ordination of the muscles and confusion follows. Illusions are manifest. The gait becomes staggering and the muscles uncontrolled. As the concentration of alcohol in the blood reaches four milligrammes per cubic centimetre, the stage of stupor is reached. In larger doses, to a concentration of five milligrammes, complete unconsciousness, or a state of coma, results, and the individual is spoken of as being "dead drunk."

The "dead drunk" is not endangering any life except his own. It is the man who is not ordinarily considered drunk, yet who is under the influence of alcohol sufficiently to have his faculties impaired, who is of more danger so far as the lives of his fellow-men are concerned. Only abstinence can make us safe.

—H. W. VOLLMER, M.A.

DRINK AND DRIVING

Prevent Accident



Be Free from Worry and Trouble

"Two or three ounces of whisky, which is a comparatively small quantity, have been shown by psychological tests to diminish attention and power of control, to reduce the capacity to learn, to affect adversely the reasoning powers and to affect the powers of making movements dependent upon rapid and accurate co-ordination.

The curious thing is that drivers of motor-cars often think that their powers are improved by taking alcohol, and that they are quicker in seeing what goes on around them and are more skilful and ready in the driving of their cars. That feeling is an illusion because it will always be found that the taking of alcohol affects the qualities which are necessary in the driving of motor-cars."

—"Good Health"

When "Temper" Goes Up, "Reason" Goes Down.

Self-control is Job-control.

Health Propaganda Board, Madras

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THE COMMON COLD.

How to combat it? What to avoid?

When to know its approach? Why it can happen to you?

THIS is a very common trouble which everybody must have experienced at longer or shorter intervals. It is commoner in children and in those whose vitality is rather too low, such as those who have a tubercular tendency, chronic alcoholics, etc. In children, certain tissues, called "lymphatic tissues," are more prominent in the upper part of the throat than in adults. Chief among them are called "Adenoids and Tonsils." These tissues form a very good nidus for many a disease causing germs to flourish. But good God has not provided us with anything which is harmful. It is like a knife which can be used for a good or bad purpose. These lymphoid tissues at the entrance of air passages, are like policemen at the gate. They may be useful only if they are properly treated. Similarly, the policemen at the gate of air passages fail to do their duty, when we do not treat them properly by inhaling dusty and heavily infected atmosphere of crowded cities. Dampness and improper food also retard their work. Pure fresh country side air, especially of dry and higher altitudes, is very congenial to their proper function. Foods containing certain essentials called 'Vitamin A' found in our common butter, ghee, and certain fish, are useful to them. The policemen should be of good vitality, and the enemy, namely the organisms should be a few. If the reverse happens, the enemy succeeds in the battle and thrives.

fear of catching cold, is the very thing that starts a cold. Again the habit of preventing even nutritious food, for fear of catching cold or indigestion, among certain classes, also lower the vitality of the infants. Give them mother's milk, later, well-fed cow's milk, then butter, ghee, etc. Avoid dingy houses in dirty atmosphere. The child's sleeping apartment should not contain dirty clothes, furniture, etc. Sudden changes of temperature and sudden exposure from a warm room to a cold draught are also injurious, since they get a sudden congestion, which predisposes infection to take a firm root. Similarly, the habit of children playing in the sun, perspiring and suddenly indulging in tap water is probably, one of the causes of colds in our children. Most of the infectious fevers, especially measles and influenza, start with a cold. It should also be remembered that a discharge from the nose may be due to some other causes which require a prompt attention. Diphtheria, a foreign body in the nostril, ulcerations, Syphilis, congenital or acquired, are among such causes. In adults, chronic irritations in the nose caused by nasal obstruction, irregular bony or fleshy growths give rise to sneering or nasal discharge, etc. Neighbouring infections of bony cavities connected with the nasal cavities, are also to be remembered.

After a short exposure or indiscretion in a predisposed individual, the trouble starts with a slightly irritating sensation in the nasal cavities, followed by sneering and watery discharge—Nature's

To put it more clearly, the habit of keeping infants in closed rooms, for

attempt at throwing out the foreign element. The discharge at first is watery, then, sticky. In severe cases, it gets even slightly reddish, and in children with adenoids, there may be actual blood. The nasal cavities will be bright red with congestion. During this stage there will be slight fever, headache, pain in body, nasal obstruction, bad taste for food, uneasiness, and irritability. A day or two later, the discharge gets thickened and slightly yellow white. This is the beginning of resolution, when body defence has overpowered the invader, and begins to throw out all that is dead and damaged in the fight. During this stage the headache and fever subside, and the nasal obstruction is less marked. A few days later, everything comes back to normal. But in those whose defence is at a lower ebb, this resolution does not happen. The infection gains the upper hand and proceeds in all directions. It may gain access to the bony cavities with pain in cheek or forehead, or into the ear, especially in children, causing acute or chronic ear discharge, or into the throat and air passages, giving rise to bronchitis or even to pneumonia especially in children.

In early middle age a chronic cold, or frequent attacks of cold which is not easily resolved, but goes on spreading into a cough, is one of the earliest signs of tuberculosis. In such cases, a chronic cold spreading into the ear gives deafness, chronic affections of bony cavities or irregular fleshy or bony growths in the nose, causing further nasal obstruction, thus giving a vicious circle. In

children a cold spread into the hinder part of nose, gives swelling of adenoids, which cause obstruction to nasal breathing, consequent mouth-breathing of air unfiltered and unmoistened through the nose, snoring, undeveloped chest and an idiotic look in the face.

Hence the importance of prophylaxis against this simple-looking malady, which has really far-reaching effects. Children should not be kept in dingy and stuffy rooms with plenty of dirty clothes or furniture, or in dusty atmosphere. A draught should be avoided, otherwise, fresh air is a good tonic. This applies for adults as well. They should avoid irritating atmosphere as sewage emanations, irritating gases, etc. Milk and milk products, and other sources of 'Vitamin A' are also useful to increase the resistance of the body. Sudden exposures and indiscretions should be avoided. Mouth-breathing should be prevented and adenoids preventing nasal breathing, should be removed. Sources of chronic irritation in the nose or its neighbourhood should be attended to.

Curative :—Rest indoors, warm bath, and other methods of promoting sweating are useful. A saline purge, and a light diet with barley water is to be recommended. Steam inhalations with menthol or Benzoinco or warm alkaline, nasal wash with common salt, borax and Bicarbonate of Soda, is also useful.

—DR. M. R. BAIL, M.B.B.S.,

297, Thambu Chetty Street, Madras.

Though the common cold may be familiar it should not be treated with contempt, for it is costly, incapacitating and potentially dangerous.

Start treating it at the first sign and use every precaution to avoid giving it to others.

Wise parents, like wise teachers, know the best place for a child with a fresh cold is home-resting in bed.

—Editor, "Arogya Margam."

Your Hands and Disease

How do Itches Spread?

Scratching by Hands.

How do Eye Troubles Arise?

Constantly Rubbing by Dirty Hands.

How do the Digestive Troubles Originate?

Eating in Dirty Hands.

How do you get

Cholera? Small pox? Typhoid Fever?
Septic Fever? And Dangerous Infections?

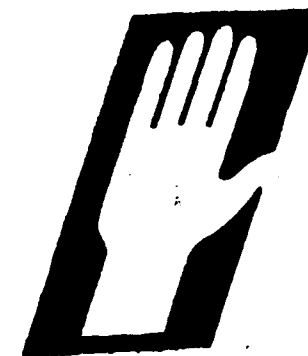
By the Misuse of Hands.

So

Clean

Hands

Please



Clean Hands said to Dirty Hands:
"Are'nt you ashamed?"

Dirty hands began to cry:
"My owner to be blamed."

He bites my nails and makes them hurt,
Instead of soap, he puts on dirt,

A little cold cream day by day,
Would keep my cracks and chaps away

"Oh Dear" and here he wept the faster,

"To be the servants of such a master,"

HINTS FROM THE HEALTH DEPARTMENTS.

To Save the Teeth.

A section of the population is not yet educated up to the idea that teeth may be saved by filling, and this seems to be especially marked in reference to children. They prefer to wait until toothache gives the signal for the removal of the offending tooth by force. A large number of the children coming to the school clinic are found to have teeth to be decayed that conservative treatment is impossible. Many of these have previously refused treatment after the routine inspections, when the conservative measures would suffice to save the teeth, and have later applied to be treated at the stimulus of toothache, when any form of treatment other than extraction is impossible.

Drink More Milk.

From all quarters, dietetic, hygienic, economic and politic, the public is encouraged to drink more and more milk. No other food, excepting eggs perhaps, contains such well-balanced nutriment in a form so digestible and easily assimilable, and the movement to secure one-third pint daily to every scholar in the elementary schools throughout the country, is one worthy of every encouragement. But the milk thus provided, if not coming from a tuberculous-free herd, should be brought to near the boiling point so as to destroy any living bacilli that may be present and thus ensure freedom from the risk of infection, which according to experience, is by no means negligible.

Evening Use of School Buildings.

I would particularly draw attention to the inadvisability of using school

buildings for evening purposes not related to education. The occupation of class-rooms during evenings does not allow the necessary time required for efficient cleaning, and moreover leads to insufficient ventilation and contamination of the air by raised dust.

Light and Air.

The policy of planting trees and tall shrubs in gardens and highways is a good one providing the health aspect of the question is not forgotten. In my opinion trees should never be planted in such positions that they will exclude health-giving light and air from living rooms. The housewife and young children spend a considerable part of their time in the kitchen or living room, and if these rooms are constantly shaded by adjacent foliage, the house not only tends to take on a somewhat gloomy aspect, but as light is destructive to microbes, may actually encourage and breed disease.

Towards Cleaner Air.

Progress in smoke abatement is steadily being made in connection with industrial plants; but the domestic fire still remains responsible for a large amount of atmospheric pollution, this being particularly evident on Sundays. In order to lessen the pollution, from the domestic fire many good improvements have been made in the types of modern grates, with no doubt still further improvements to follow. It is to be hoped that this, in combination with a smokeless fuel at a price within the reach of everybody, will prove a solution to the domestic problem.

—“Better Health.”

Health Propaganda Board, Madras.

(REGD.)

SERVICE BUREAU.

LIST OF LEAFLETS.

Feeding of Infants.	House Fly (Tamil & Eng.)
Nutrition.	Puerperal Sepsis.
Consumption.	Care of Pregnant Women.
Venereal Disease.	Drink More Milk.
Dirt.	Leprosy.
Breast-feeding.	Ear Diseases.
Health for All	Dental Health.
Friendly Brushes.	Care of Babies.
How Ramasamy Rears a Child	Tuberculosis.



The above leaflets may be had on application to :—

The Health Propaganda Board,

PANTHEON GARDENS,

Egmore : : MADRAS.

Arresting The "Middle Age Spread"

Sound Advice from a Doctor to Men Over Forty

THERE are many who fall into old-age habits long before old age actually arrives, while others try to cheat Nature by acting young without feeling so. While both these practices, as a rule, are to be deplored, there are many things which can be done to postpone the march of old age. One of the best is to have an annual overhaul.

A great many more things in the world to-day than we realize are subject to a regular overhaul. Take, for instance, the great train, tram, and bus services. The engines and vital parts of these great concerns are not allowed to run until they break down. No, they are regularly inspected and watched for wear, whether they require it or not. If it were not for this fact, breakdowns would be much more frequent.

A Common Neglect.

We clearly recognize the need for this care in an age of efficiency and precision, yet, strange to say, few of us apply it to the human body, which is the most vital thing in existence to each one of us. Take, for example, such organs as the brain, heart, lungs, liver, and kidneys. We cannot live without any one of these. A weakening of the function of one such organ involves ill-health, while complete failure means death. Strange, then, that we should think so little about them and give them such scant attention.

In the case of machinery it is possible to obtain new parts for old, but in the human body there is no substitute for a defective heart or a diseased lung. What, then, is the only reasonable and sensible thing to do in this matter? The answer is, first of all, to live daily in accordance with the laws of health. This will allow all organs to function in the best possible manner and for the longest time. Secondly, visit your doctor once a year and have an overhaul to see that all is well.

Signs of Age.

One sign of advancing age is what is sometimes called "the middle-age spread." This is partly due to slackness in the muscles of the abdomen and trunk. In most cases such changes are assisted by overeating and lack of exercise. Other contributing factors are constant sitting especially in a bad position, careless walking, and bad habits generally.

Not only do such changes spoil the figure from the point of view of appearance, but they also have their health dangers. The abdominal muscles support some of the most important organs of the body, and when these muscles become flabby, the abdominal viscera sag forward and downward, giving rise to such things as floating kidney, dropped stomach, and kinks in the intestine.

Dangers of Obesity.

Obesity is one of the chief dangers of middle life, especially in women. Its advent is often gradual, and it is therefore easy to dirt into this condition. It should be remembered that most fat is really food which is in excess of the needs of the body. It is food which has been digested but which is not, for the present, required. Hence it is stored up in this way. There are some who think that fat is a sign of strength, but the contrary is really the truth.

There is a little doubt that most of us eat too much, and therefore there are many more who cut their lives short by overeating than by eating too little. The taking of extra food is not so serious matter, especially when physical work and exercise are considerably reduced.

Though one might reasonably expect that at this time of life the appetite would be correspondingly reduced, such is not often the case. In fact it is very often increased. It is surprising how often, at this age, people develop a weakness for sweets and rich foods.

Besides rendering movement distinctly uncomfortable and lessening many of the joys of life, fat may seriously hamper the heart's action. It also checks the action of the liver and predisposes to other serious maladies such as gout, rheumatism, high blood pressure, and apoplexy.

Simple Treatment.

In common with all complaints, obesity is more easily prevented than cured. In all cases where unnecessary weight is being put on, it is best to stop this right way by cutting down the diet and taking more exercise. In cases

where the fat has already arrived, the same measures should be adopted. All drugs advocated are either useless or dangerous and therefore an absolute waste of money and time. No advertised "cure" should ever be taken unless it is something given under the supervision of an experienced physician. The exercise and diet method, although slow, is safe and sure. By this means one must not expect to reduce weight by more than one or two stone per annum. A starvation diet or excessively vigorous exercise should not be tried. It is best to reduce gradually by about one-quarter to half a pound a week.

It is impossible to give a daily diet chart, which would suit everyone, but generally speaking, the foods to avoid are all rich dishes, alcohol, sugar, new bread, thick soups, and root vegetables. Sugars, fats, and protein foods should be taken sparingly. Fruits and green salads should form a large part of the diet, and it is possible that two meals a day will suit many people better than three, once the age of fifty is reached.

It is a very good plan to make breakfast a fruit meal. Milk may be taken, but not too freely. Eggs also should be used sparingly. In aggravated cases, of course, a more strict, reducing diet may be necessary.

Walking, bathing, and elimination in all forms are to be encouraged, and where much weight is lost, it is advisable to have massage daily to preserve muscular tone. To improve the figure, all bad habits of sitting or standing must be corrected. Correct breathing is also important.

—Dr. A. R. AURANC, M.R.C.S.,

L.R.C.P., L.D.S., R.C.S.,

HYGIENE DURING PREGNANCY

Patient. Dear Doctor, my last pregnancy was full of troubles and worries, because I did not follow your advice. Can you not tell me now what they are and how I should guard my health?

Doctor. Well, the following are the Simple Rules of Hygiene during Pregnancy:—

SLEEP. The pregnant mother should have at least 8 hours of sleep every night in a well-ventilated room. A nap or rest in the after-noon is also advisable.

FRESH AIR, SUNSHINE AND EXERCISE. Get plenty of fresh air both day and night. A daily sunbath is very helpful. Housework is good exercise. Perhaps walking is the most suitable exercise at this time.

WATER. Drink 6 or 8 glasses of water a day for internal cleanliness. Don't forget to drink between meals.

BATHING. Don't omit the daily bath. Cleanliness keeps the skin active and helps it to throw off impurities.

CHEERFULNESS. Guard against fear, worry and exhaustion. They affect digestion.

CARE OF TEETH. Teeth need special attention during pregnancy. Eat foods rich in tooth-building materials such as milk, eggs, green vegetables and fruits. Help combat mouth acids which dissolve tooth enamel and invite growth of bacteria of decay.

AVOID CONSTIPATION. A constipated condition aggravates nausea and interfere with the assimilation of food.

HUMORS AND VAPORS

The father was reading the school report which had just been handed to him by his hopeful son. His brow was wrathful as he read: "English, poor; French, weak; Mathematics, fair"; and he gave a glance of disgust at the quaking lad. "Well, dad," said the son, "it is not as good as it might be, but have you seen that?" And he pointed to the next line, which read: "Health, excellent."

HEALTH CRUSADE

Come with Song and Laughter gay,

And Join the Health Crusade to-day;

No Aches, No Pains, No Grumbles here,

We've pledged ourselves to Health and Cheer.

A GOOD TIME-TABLE

TIME	For trouble and worry... <i>The Past</i>
	For happiness ... <i>Now</i>
	For effort ... <i>To-day</i>
	For which to plan ... <i>The Future</i>
	To quarrel ... <i>Never</i>
	To rest ... <i>When your Work is Done</i>
	To do a kindness ... <i>At Once</i>

Visit Your Doctor

Is your health	+
" "	?
" "	—

EARLY

THE RULES OF HEALTH

The Ten Rules.

1. Who works indoors, outdoors, must play,
And walk at least a mile a day.
2. Closed windows always are a sin
So let a little outdoors in.
3. And if indoors by day you keep,
Then out of doors you ought to sleep.
4. The hours to spend in slumber then,
For elders eight, for children ten.
5. Eat slowly, not too much of meat,
And something rough as well as sweet.
6. Use water freely, it's about,
Our greatest boon inside and out.
7. And walk and stand and sit erect,
It helps your health and self-respect.
8. Breathe deeply, keep your mind serene,
And keep both mind and body clean.
9. Avoid the folks who cough and sneeze,
And violate such rules as these.
10. The tenth rule is of all the gem—
Be moderate in all of them.

(Douglas Malloch)

Are you chained to the coffee pot?

— o —

The Fallacy of Depending on Stimulants

SOME time ago I had under my care a prominent government official. On the second day after his arrival at the institution, he called me to his room and said, "Doctor, something is wrong; evidently the treatments do not agree with me. I have a headache. In fact, I ache all over. I cannot apply my mind to the work I must do."

Knowing he was a user of coffee, I said to him, "It is not the treatments that are responsible for your condition, but the fact that you had no coffee since coming here."

He ridiculed the idea and said, "No, that cannot be it."

"Well," I replied, "let me have a demonstration."

I ordered a cup of coffee for him, half an hour after drinking it he came to my office all smiles, and said, "Doctor, you were right. I feel like a different man."

Then I said to him, "This is the best evidence I can present to you that coffee is harmful. A good thing can be given up without suffering; but not so a drug, whether that drug be cocaine, morphine, nicotine, or caffeine."

What Coffee Does.

Caffeine is used because it is supposed to relieve fatigue. Let us see what coffee actually does. In the human body we have certain cells that are capable of storing up energy somewhat as a storage battery is capable of being charged and rest that these cells are charged with energy granules. During the working period the stored-up energy is liberated and utilized in doing brain and muscular work. When the cells are almost depleted, fatigue is felt. This is a warning to stop and give nature a chance to rest and replenish, or recharge, these cells.

If, however, at this point a cup of coffee should be resorted to, the fatigue disappears and mental or muscular work can be again resumed. Coffee does not recharge these little batteries with a new supply of energy. It merely makes the person unconscious of his real condition and need, and makes it possible to squeeze out a few of the extra energy granules that nature would have held in reserve as a margin of safety, just as a wise business man retains in the bank a certain sum to be drawn upon in case of an emergency. The man, therefore, who depends upon coffee to keep fit is headed toward physical bankruptcy.

Caffeine does not impart energy. It irritates the brain cells and nerve centres. This temporarily imparts increased activity to the heart and muscular system, and strength seems to be increased. Imagination becomes more vivid. This seeming improvement is, in fact, merely nervous excitement. It is the same feeling that the fever patient experiences when his temperature rises. He becomes talkative and feels quite fit. When the stimulation produced by the cup of coffee subsides, then there is felt a corresponding degree of languor, and another cup of coffee is demanded.

In the absence of coffee, a cigarette will answer the same purpose. Since coffee cannot be carried about during the day and the cigarette can, the cigarette is resorted to. It is not surprising that practically all cigarette addicts are found also to be coffee or tea-drinkers. The use of coffee naturally leads to the use of tobacco and cigarettes. Both are habit-forming drugs.

Whipping A Tired Horse.

The tired, worn-out mother, feeling the need of something to spur her on, or the society woman who wishes to maintain a feeling of fitness, having made the discovery that a cup of tea or a cup of coffee serves this purpose naturally resorts to its use; or to the cigarette.

These stimulants possess no nutritive properties. They answer the same purpose that the whip does to a worn-out or tired horse. The whip is a poor thing to depend upon, and yet this is what these women are doing when they resort to that delusive cup day by day. Dependence is placed on the cup of tea or coffee nervous exhaustion reaches the point where medical advice, and

possibly a stay at some medical institution for rest and treatment, is necessary.

Nervous exhaustion is a disease that is becoming extremely common in countries where dependence is placed upon these beverages to keep fit.

During the past forty-five years I have been connected with medical institutions where no coffee is served to patients. During that period I have been able to observe the effect of withholding coffee upon scores of patients. In every instance I have found it results temporarily in the lessening of mental and muscular fitness, and invariably headache and mental and muscular weakness are experienced.

In one of his books, Dr. Eugene Lyman Fisk says:

"Coffee is essentially a drug; that is, in itself it has no food value or nourishing principles. Its effects are mainly due to an alkaloid, caffeine, which is used in medicine as a nerve and heart stimulant, although its use is being much restricted because of its uncertain effects. In this it resembles tobacco. . . . Caffeine is now given chiefly in emergencies, and is no longer combined with headache remedies, since it increases the depression or poisonous effects of such drugs.

The evil effects of tea-drinking, with the benefits accruing from abstinence therefrom, are clearly set forth in the following letter by John Wesley, the founder of the great Methodist Church:

"After talking largely with both men and women leaders, we agreed it would prevent great expense, as well as health as of time and money, if the people of our society could be persuaded to leave off drinking tea. We

resolved ourselves to begin and set the example. I expected some difficulty in breaking a custom of six and twenty years standing; and the first three days my head ached, more or less, all day long, and I was half asleep from morning to night. The third day, on Wednesday, in the afternoon, my memory failed me almost entirely. On Thursday morning my headache was gone, my memory was as strong as ever, and I have found no inconvenience, but a sensible benefit in several respects, from that very day to this."

Illusions About Stimulants.

A short time ago there appeared an article in the daily papers, stating that certain firm in Great Britain made the discovery that their workers could do better work when permitted to smoke during a certain portion of their working hours, and hence the firm determined to allow them three-quarters of an hour in the morning, and the same amount of time in the afternoon where-in they might smoke. Tobacco trusts made the most of this in advertising their wares.

Everyone knows that tobacco is not a food. It does not add strength to either mind or body. It does not enable a worker to do better work. It does, however, enable a smoker to do better work. The need of tobacco is not felt by one who is in normal condition. The non-smoker does not feel the need of a smoke in order to do better work. In fact, a smoke would unfit him for work.

Tobacco enables the smoker to do better work for the same reason that a dose of morphine enables a morphine addict to do better work than he is able to do if deprived of it. The same is true of the coffee addict.

The fact is that a healthy person does not feel the need of tobacco, coffee, or any other drug. He does not feel the need of either a mental or a muscular whip, and the one who feels the need of being whipped up is in a run-down condition. It is especially unwise for such a one to depend on a stimulant to keep *Feeling* fit. He needs, not whipping up, but building up. —DR. D. H. KRESS.

How to Deal

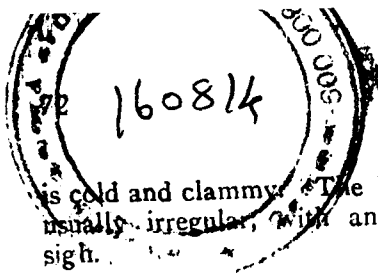
WITH

FAINTING AND COLLAPSE

INSENSIBILITY, apart from sleep or death, may be caused in many different ways, and it is desirable that all should know something of the causes and treatment of this condition.

A faint is the commonest type of insensibility, and fortunately is seldom likely to prove dangerous. Prolonged

standing in a queue or crowded hall, especially if the humidity is high, tight clothing, or sudden bad news, will often cause a susceptible person to faint. If standing, the patient will feel giddy and then fall. The pulse becomes very feeble and rapid and it may even fail at wrist. The face may either be pale or flushed and the skin



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AROGYA MARGAM

is cold and clammy. The breathing is usually irregular, with an occasional sigh.

If the patient is in a crowded room, by all means try to get him out in the fresh air. Lay him on his back, turn his head to one side, and raise or lower the head according to whether the face is flushed or pale. Undo all tight clothing around the neck, chest, and waist, and sprinkle the face with hot or cold water alternately.

Do not, as is often done, give anything by the mouth till consciousness has fully returned. Sal volatile is often between the lips of an unconscious patient in the hope of stimulating the heart, but such treatment is dangerous. A better way of stimulating the heart is to hold smelling salts to the patient's nose, after testing their strength yourself. Warmth applied over the abdomen and heart, and vigorous friction of the limbs towards the body will also have a beneficial effect. When the patient has regained consciousness, water or a hot drink may be given as the patient wishes, and a desire for sleep should be encouraged.

Fits

Fits are more sudden in their onset and more alarming in their character than fainting. Young adults are most frequently affected.

A scream or cry as the person falls is not uncommon, and he then passes into a state, of convulsions which affect both the body and the limbs.

The hands, elbows, and legs may thus be badly bruised through hitting surrounding objects. Frothing at the mouth and biting of the tongue may also occur.

The first thing to do is to pull the patients away from anything on which he might injure himself, and to move light furniture out of his way. They

kneel behind him, and, supporting his head, place a cork or a pencil wrapped in a handkerchief between the teeth to prevent the tongue being bitten. Though the limbs should not be needlessly restrained, beware of the patient's fits. Fresh air and freedom around the neck, chest, and waist are also important. After the fit is over the patient should be encouraged to sleep, though a careful watch should be kept to see that his breathing remains normal.

Concussion and Compression

After a severe blow on the head, an unconscious condition known as concussion or stunning may occur. This is caused by a jarring of the brain, but if the injury is accompanied by a fracture of skull whereby pressure upon the brain is produced, the patient may pass into a condition described as a compression of the brain.

These two conditions are readily distinguishable. In concussion the face is pale and the pulse is quick and weak, while the breathing is shallow. The symptoms of compression are a flushed face, a pulse full and slow, and breathing accompanied by loud snoring. The body temperature is raised and the pupil of one eye may be larger than that of the other. These symptoms may, however be for some time after the injury.

For both these conditions the first-aid treatment is similar. Treat the patient as you would were he be in a faint, and in addition apply ice or cold water to the head continuously.

In any case of insensibility, remember the doctor. Seek his advice early, as it is very likely that he will be able to find the cause of the trouble and may make suggestions which will help to prevent the re-occurrence of the attacks.

THINGS MOVE

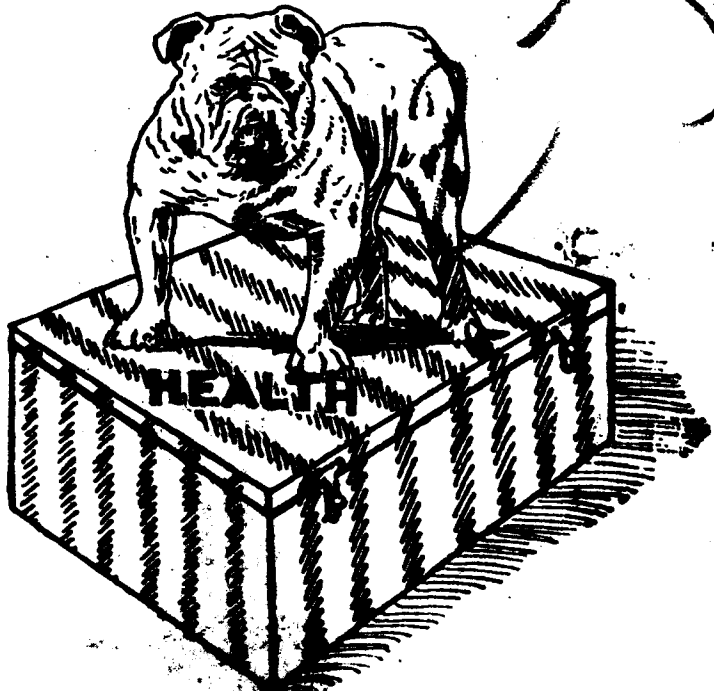
FOR PEOPLE OF

MENTAL AND PHYSICAL STRENGTH

"SOW AN ACT AND YOU
REAP A HABIT.

A HABIT AND YOU REAP
A CHARACTER;

A CHARACTER AND YOU
REAP A DESTINY"



**Is a Treasure
That Needs Well Guarding**

Edited and Published by Dr. U. D. Gopal Rao at No. 57, Thambu Chetty Street, Madras
on behalf of the Health Propaganda Board, Egmore, Madras
Printed at The Artisan Press, No. 17, General Patters Road, Mount Road, Madras

KEEP IT WELL
IN HAND
HEALTH

OFFICE OF THE HEALTH
5-JUL-1938
MADRAS

AROGYA-MARGAM

A MONTHLY JOURNAL DEVOTED TO
HEALTH & HAPPINESS PUBLISHED
UNDER THE AUSPICES
OF

Vol. I

No. 3

THE HEALTH PROPAGANDA BOARD, MADRAS

• JUNE •
1938

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"PANTHEON GARDENS"
PANTHEON ROAD
EGMORE :: MADRAS

Annas Two
per copy

GET THE HABIT OF HEALTH.

"Little Drops of Water
Little Grains of Sand
Make the Mighty Ocean
And the Pleasant Land.

●
Little Bricks of Habit
Laid up Day by Day
Make a Healthy Body
That's the Only Way."

HEALTH PROPAGANDA BOARD
PANTHEON ROAD
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IMPORTANT

All the manuscripts for publication, books for review, Exchange of Journals and other correspondence relating to the Editorial Section should be sent to the MANAGING EDITOR, *Arogya Margam*, 57, Thambu Chetty Street, Madras.

Original articles are accepted with the express understanding that they are contributed solely to this journal. All matters published in *Arogya Margam* is copyrighted.

The manuscripts must be typewritten, and double spaced, and the original copy should be submitted. Blocks for illustrations will be supplied by us if the original illustrations are sent.

The Managing Editor reserves the right to alter, delete, or make necessary changes in the matter sent for publication. No reasons will be given for rejecting articles.

All business correspondence, advertisements, subscriptions, and other payments should be made to the SECRETARY, HEALTH PROPAGANDA BOARD, Pantheon Gardens, Pantheon Road, Egmore, Madras.

ADVERTISEMENTS

Complete copy, instructions and blocks must reach this office not later than the 5th of every month in which the advertisement is to appear. It is understood that the old text (running) is to be printed, if no new copies of advertisement reach this office a month previous to the date of publication of *Arogya Margam*.

Health Propaganda Board, Madras

Have you any friends who do not yet read "AROGYA MARGAM"
Regularly?

If so, one of the best ways you can spread the health knowledge which is interesting you so much is to urge them to buy this right information journal for Three Months. At the end of that time, they too will have become keen on letting their friends know of the great help this journal can be and will urge them in their turn to read "AROGYA MARGAM" regularly. On the other hand you will allow us to send a specimen copy to them, free without obligation. Please send the form below or add the names on a separate sheet of paper.

To

THE SECRETARY,

"AROGYA MARGAM"

HEALTH PROPAGANDA BOARD,

PANTHEON GARDENS,

PANTHEON ROAD,

Egmore, MADRAS.

Sir,

I am interested in health subjects. May I request you to send me a free copy to the following address.

Address (in block letters.)

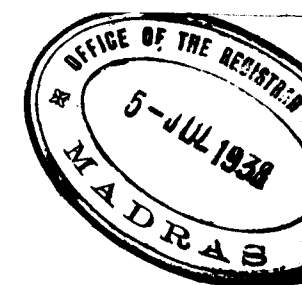
Yours faithfully,

Signature.

FOREWORD

Activities carried out in the field of Public Health Education by voluntary associations are of considerable value for the furtherance of Public Health and will be useful and necessary adjuncts to the work carried out by the Public Health Department. There is no doubt that better progress can be made in the advancement of Public Health and the activities undertaken can be rendered more effective if the official agencies are supplemented by a large number of voluntary organisations similar to the Madras Health Propaganda Board throughout the Province. The great preponderance of Public Health work is still in the hands of Governmental agency and must continue to be so; but at the same time, the work of voluntary associations has contributed to the awakening of the public to the realities and importance of health. Environmental hygiene has made great strides, but the personal and communal health has not received sufficient fillip and it behoves all agencies both Governmental and voluntary to direct their attention to the latter. Here is the field 'par excellence' for voluntary workers whose influence cannot but have a beneficial effect. Constant and continuous propaganda is an essential which is not lost sight of even in countries more advanced than ours and it is therefore an activity which should always remain in the fore-front.

A great many of voluntary agencies like the Health Propaganda Board are fortunate in having doctors as members whose technical knowledge cannot but have an abiding effect on such ventures and also help in rousing the public to adopt measures for the eradication of preventable disease and in developing a "health conscience". The family doctor plays as great a part in promoting Public Health as the members of the Public Health Department in that the former has the advantage of coming into contact with parents, infants, toddlers and grown-up children in virtue of his position and is therefore in a position to diagnose their physical or other defectives in time and apply or advise the necessary corrective. In drawing attention to this aspect, the object is to make the Health-workers and Doctors feel that they are inter-dependent and cannot move in water-tight compartments.



It is needless to point out that the work of any association is doomed to failure unless it reaches the rural population, whose improvement in matter of health must be the first plank in any health scheme.

2. The objects of the Madras Health Propaganda Board being the stimulation and promotion of interest in, and knowledge of, all matters connected with the general and personal health of the population of Southern India, the journal "AROGYA MARGAM" which the Board proposes to publish will, it is felt, be a medium through which the Board can aim to reach the general public in every part of the province. In publishing the journal, there is no doubt that the Board has taken a step in the right direction.

The number of popular Health journals published now in Southern India is very few. I hope the endeavour of the Madras Health Propaganda Board in bringing out a monthly journal of the type of "AROGYA MARGAM" will serve a very useful purpose in placing before the public facts and figures of the recent advances made in Public Health and preventive medicine will be welcomed by the public.

3. The journal "AROGYA MARGAM" appears to be comprehensive and I congratulate the Health Propaganda Board on their venture and I should like to suggest, if I may, that an effort should be made to publish the journal in all the languages of the province. It is perhaps too early to expect the Board to incur expenditure on this scale, but I trust that it will be borne in mind and given effect to when experience and financial considerations permit of expansion their laudable endeavour.

C. M. GANAPATHY,

Lieut. Col., I.M.S.,

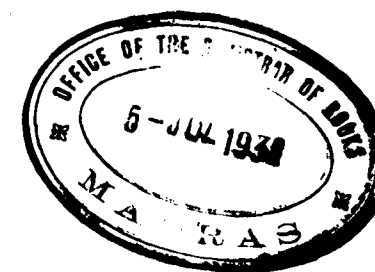
Director of Public Health, Madras.

6th April, 1938.

The

Avoidable

Malnutrition



(Continuation of Last Issue.)

IN a previous note we wrote that malnutrition prevails among the middle and upper classes and that this was certainly avoidable. We would now consider how it could be avoided.

COOKING.

Cooking by itself may not be bad, because recent researches reveal that it is not so destructive of vitamins as it was supposed to be a few years ago. But we, Indians, as a rule throw away the water in which rice, vegetables, etc., are cooked. This means that we throw away the grain and keep the chaff for consumption. All the available proteins and vitamins are thus lost unwittingly, and the body is slowly thrown into a state of chronic malnutrition with disastrous consequences to health.

It must be noted that while moderate cooking is not at all injurious, prolonged and excessive

cooking certainly deprives the food stuffs of their essential vitamins. Besides, substances such as fresh lime, tomatoes, etc., which are rich in vitamin C should never be cooked at all, as this vitamin will be almost lost when submitted to cooking under even moderate heat. Cooking, therefore, should be utilized with discretion. Either only sufficient water should be used for cooking rice and vegetables, or, if that is not possible, the water in which these food stuffs are cooked should not be thrown out as a waste, but utilized as Kanji or soup. Rice kanji can be mixed with butter milk, and this would add to the nutritive value of the latter. Vegetable extractions can be spiced to taste and drunk as soup. It would not only stimulate appetite but also help in maintaining the nutrition of the body, because it is no longer than the whole essence of the cooked stuff. We wonder

how many of our readers are in the know of these things?

OVER-EATING.

The food you take may be well balanced from the point of view of nutrition, and yet you may suffer from effects of malnutrition. Why? In most cases, it is due to over-eating. Human body is a very delicate machine — it does not easily tolerate either under-eating or over-eating. While under-eating will make you lean and lose weight, over-eating will make you unnecessarily fat and heavy. Both are bad from the point of view of health. This is especially true of rice-eaters who are in the habit of not getting out of the menu till they feel an euphoric sense of a satisfactory distention of the stomach. That this is true with most of us cannot be denied.

The results of over-eating apart from obesity are dyspepsia, constipation or diarrhoea, and frequent bouts of indigestion, which, in their turn, lessen the power of the body to resist serious diseases like tuberculosis, pneumonia or typhoid. Another equally important result, but not so obvious as the above, is that the body is unable to utilize the nutrition to its best advantage

owing to the disordered condition of the digestive canal whose cells and secretions are thrown out of gear. Since over-eating is avoidable, and should be avoided, it indubitably is one of the factor in the avoidable malnutrition prevailing among the well-to-do classes.

USE OF MILLED RICE.

Use of milled rice has become too common among the people in this country whose staple diet is rice. We do not know whether milling of rice could be prohibited by legislation and unless this is done as urged by our contemporary "The Indian Medical Journal." The use of milled rice cannot, in any nearness of time, be prevented by mere propaganda through press or platform.

Hand-pound rice has become almost a rarity in our Country, and with it we have lost the source of common and cheap nutrition to the poor and the rich alike. Dr. Aykroyd and Mahathma Gandhi through their respective organisations are trying to revive the use of hand-pound rice and thus conserve the health of the nation. If to these efforts the Provincial Governments would contribute its quota

of help by preventing the rice mill from over-milling and polishing the rice, if not completely stop the mills from milling rice, this would go half way at least towards the solution of this vexed and complicated problem of social health. Till then, such of those people who could afford to use hand-pound rice only should do so.

It is in the pericarp of the rice grain there is Vitamin B, and assimilable protein. This pericarp is entirely destroyed in the process of milling. With the destruction, rice retains only its carbohydrates. The consumption of such a rice leads to different degrees of a vitammonosis B. Beri-beri is an expression of severe deprivation of this vitamin. Even toxæmia of pregnancy is now said to be due to a vitammonosis B. Apart from these extreme cases, a medical practitioner often meets with people who complain of lassitude, vague pains in the body, head-ache on rising in the morning, loss of appetite, etc. These are indeed dug to different degrees of a vitammonosis. All these could be avoided by using hand-pound rice. If this is not easily available, extract of marmite should be added to our diet in small

quantities daily, so that the body may not suffer from the ill-effects of Vitamin B deficiency or insufficiency.

There is another caution which Col. McCarrison used to give us when he was in charge of Coonoor Nutrition Research Laboratories, and that is: Do not throw away the water in which rice is washed preliminary to cooking. He said so, because he found after a series of experiments that the water soluble portion of Vitamin B will not be lost in the rice-washed water if thrown away. This is a small but an important factor or in our programme to avoid the avoidable causes of malnutrition.

USE MORE MILK.

There is a Drink More Milk campaign in England. That is a sensible campaign which we ought to have in our country also. That milk is a perfect food was well known to our ancestors. This has been confirmed by modern science. The poor may not have money to buy milk, but the middle and upper classes in our country could easily buy and use more milk than what is actually the case now. This is a sure method of avoiding malnutrition among this

class of people. At least one pint a day should be consumed to have its beneficial effects on the body. If money is a consideration at least skimmed milk should be taken generously.

MIXED DIET AND FRESH SALADS

By mixed diet we do not mean the conventional diet of vegetable and animal origin. It is said that animal proteins are richer and more assimilable than vegetable proteins. But Science has not said its last say in this matter. To our mind, there are ethical reasons which go against taking food of animal origin. It involves killing which is repugnant to man and God. Besides, there is such a variety of food in the vegetable world that if only they are selected with discrimination they would be sufficient more than sufficient, to meet our body needs. Variety, therefore, is needed to keep up the value of food. Wheat can be alternated for rice with great benefit. More greens can

be used with good effect. Addition of fresh salads to our cooked dishes will supply the body with fresh vitamins, minerals, proteins and carbo-hydrates in their pristine state. Fruits are both pleasant and nutritive. Nuts, like ground-nuts, almonds, walnuts, give us a rich source of proteins, fats and minerals.

Variety in food and addition of fresh salads and fruits are ideal methods to maintain the body in a continuous state of health and nutrition. The class of people about whom and for whom we are writing can certainly afford a variegated diet of this nature. Malnutrition among them is more due to their ignorance of the relative value of food-stuffs than to impecuniosity. Therefore it can be avoided, and if they do it, they will not only be doing good to themselves but will be an example to the poorer people why by contact and association will imbibe a correct perspective in matters pertaining food within their financial means.

NUTS AND NUTRITION.

IN the world of agriculture, October is the month for nut gathering, the completion of the harvest with Nature's dessert. Late apples and pears, which will stand storage through the winter are also harvested in October, and the year's round of field work begins again. (The modern world is little dependent upon the natural cycle, all the good things of the earth being available at all times. This is an immense advantage to us for it removes the fear of famine which until the last century was a constant menace, and the minor forms of starvation which result from lack of certain necessary foods for long periods, causing what are known as deficiency diseases such as scurvy, rickets, and many others, which have either gone altogether or are disappearing. But we lose something by neglecting the natural seasons, for to a large extent we have become tuned to appreciate the fruits of the earth as they fall due.

Nuts, using that word not in its strict botanical meaning but in its popular sense of edible kernels contained in hard shells, supply **very useful and acceptable foods**, not of the first class for the oil and proteid which form their bulk are not the most serviceable to man, but very good second class food which supplies certain vitamins and accessory substances which play a somewhat obscure part in our economy. One of these vitamins known as E appears to be necessary for fertility and it is not improbable that lack or poverty of this substance may play some part in the troubles of child-birth. So without extolling nuts as some enthusiasts do, we think that they

should take a more prominent place in the dietary than they have done of late.

We have four native nuts; hazels, beech mast, horse chestnuts and acorns. The first two are suitable for human food, the last two are not, though there is much obscurity about the food value and alleged poisonous properties of horse chestnuts and acorns. We cultivate cobnuts and filberts, which are varieties of the hazel-nut almonds and walnuts, and we do import Brazils, coconuts, chestnuts, and various odd nuts which are little more than food curios. All nuts are similar in composition except chestnuts, which consist mainly of starch and can replace, and in some part of the world do replace potatoes and cereals. Nuts are eaten either fresh or dried, the former being superior in being less indigestible and containing more of the vitamins. Fresh walnuts and hazel nuts with their cultivated varieties, cobs and filberts, are the most valuable.

Cocoa must be included amongst the nuts, though botanically the fruit of the cocoa trees is a berry, as also the brazil nut. Cocoa, mainly in the form of chocolate, is eaten in enormous quantities largely as a luxury, but its food value is not inconsiderable. Taken as a food, it should be eaten with bread. A very useful meal in an emergency is sandwich of chocolate. It should be followed by an apple or other hard fruit, for chocolate sticks about the mouth and may damage the teeth. A cup of cocoa made with milk is an excellent night cap for children if the teeth are cleaned and the mouth washed out before going to bed.

Watch the Following Points and Avoid Food Poisoning.

1. Thorough cleanliness in the handling and preparation of all foods together with the use of clean cooking vessels.
2. All food to be protected from flies, vermin, etc., by means of fly proof safes. Foodstuffs in jugs and basins should be guarded by muslin weighted with heads.
3. Articles of food should not be prepared overnight and stored under conditions favourable to infection by germs, but should be consumed as soon as possible after preparation and efficient cooking.
4. Milk and milk products, wherever possible, to be kept in small refrigerator or cold store to inhibit the growth of germs.
5. Such food as stews, soups not to be reheated, especially during the summer months.
6. Tinned foods once opened to be immediately turned out of receptacles and eaten as soon as possible afterwards. Never purchase tinned or bottled fruits from itinerant vendors.
7. All fruits, vegetables and other green foods usually eaten uncooked especially watercress, lettuces, radishes, etc., to be thoroughly cleansed and washed in running water before consumption.
8. Persons suffering from any derangement of the alimentary tract to refrain from the handling and preparation of food. Mild cases of such illness must never be disregarded.

—HEALTH PROPAGANDA BOARD.

Malnutrition and Deficiency Disease

SOUTH Indian children are small and light when compared with better nourished children in other countries. They have a low average "Weight for height," which is largely due to lack of muscle and fat. Children in residential homes are on the average heavier for a given height than day school children. This advantage in weight is evidence of better feeding and a better state of nutrition. The institutional children are not well-fed; in many hostels only about Rs. 3 per month per child is available for food. But at least they regularly consume three meals a day, while the children of the poorer classes may be less fortunate in this respect. The fact that day school children are on the average thinner than children fed on diets costing Rs. 3 to Rs. 4 per month throws light on the diet and economic circumstances of the former.

We have examined some 5,000 children in towns and villages and found that about 15 per cent showed visible signs of food deficiency disease. The presence of such signs is evidence of a bad general state of nutrition, and is associated with poor physical development. A higher incidence of deficiency disease has been noted among children

of the poorer classes in the towns than among poor village children. The probable reason for this is that the poor in the towns eat milled rice, while the villager usually eats millet, or rice in the home-pounded state.

Further evidence that average Indian children are in a subnormal "state of nutrition" has been provided by experiments with skimmed milk. When children living on a diet largely composed of rice, or millet are given milk regularly, a rapid increase in growth, an improvement in general condition, takes place. The transformation which can be effected in an ill-nourished child by this means is remarkable.

The prevalence of food deficiency diseases such as beriberi, various kinds of anæmia, keratomalacia, etc., is also evidence of defective diet. Apart from diseases which are known with certainty to be due to diet, there are others in the causation of which this factor plays a part. It may be assumed that faulty diet is to some extent responsible for the high mortality rates observed in India—for the medieval vital statistics which are still recorded year by year.

The Combating of Mal-nutrition

The diet of a people is moulded by factors such as climate, soil, social structure, population, density and economical level, which cannot easily be changed. We cannot dissociate the problem of nutrition from the many other problems which face those who are seeking to improve the lot of the Indian labourer or ryot. The attack on malnutrition should be regarded as part an essential part—of the campaign against poverty and ignorance.

Increase in prosperity naturally tends to improve nutrition and vice versa. In a sense all social activities designed to ameliorate the condition of the people are a means of combating malnutrition. But we should not accept the idea that nothing can be accomplished until the economic state of the people is raised. There are methods of improving diet which are immediately possible.

The League of Nations Inter-Governmental Conference on Rural Hygiene emphasised that the degree of milling to which rice was subjected was of vital importance in connection with the problem of nutrition throughout the East.

Only under-milled rice should, it recommends, be supplied in Govern-

ment institutions—this is a recommendation which could easily be put into practice. The use of such rice could also be encouraged in private residential institutions, many of which are in receipt of Government grants. Another recommendation, which concerns the availability of under-milled rice, seems to present little difficulty. With regard to the checking the spread of rice mills, I recognise that before taking steps a careful study of the economic aspects of the question would be necessary. In general, the economic and other factor influencing the change over from home-pounded to milled rice have been imperfectly analysed and understood. We hope to undertake an investigation of this problem in the near future. One of the cheapest methods of improving a diet, based on milled rice is to substitute under-milled rice; the poor rice-eater cannot improve his diet by buying milk or other nutritious foods in large quantities but he could buy under-milled rice. Another cheap means of improving diets based on milled rice is the partial substitution of the rice by one of the millets. There is often a good method in institutions, for example, children can be given ragi porridge at the morning meal.

"Hindu," 31—1—38

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Give Extra Milk to your School- going Child

In our last issue we impressed on the authorities the need for supplying pure milk to school-going children

MALNUTRITION prevails supreme in Indian children. The causes are well known. Improper food, clothing, insanitary surrounding, congestion, etc., etc. The best way to overcome this deficiency disease is by supplying milk to children in schools especially elementary standards. As it is now, children are kept actually starving between 9 and 1 in the forenoon. In their eagerness to attend school they leave home as early as 8-30 and return late at 1-30, i.e., nearly 5 hours, they remain without food. Their hunger, cravings for food and other natural habits would be curbed by the surroundings and other influences—the teacher, the class-room, the songs, stories and the general commotion, etc., and when the child

returns home in the hot hours, it is dead tired; it cannot express its hunger; it gets easily irritated and angry and stubborn. Only intelligent parents understand the real trouble and at once feed the child. Now the child's face gets entirely changed. It gets cheerful and is ready to start for school in the afternoon.

This long interval of 5 hours remaining without food especially for young children in schools should be taken notice of by the authorities concerned and practical steps should be taken to supply milk to children at 11 a.m. in all elementary schools either free or at cost to be borne by the parents. The charges could be included in the fees regulations.

We may as well draw the attention of the authorities to the following views expressed by Dr. W. R. Aykroyd, Director, Nutrition Research Laboratories, Coonoor, on the above subject at the first Regional Conference of Junior Red Cross Group Counsellors held at Coonoor on 24th November 1937 :

The Nature of Diet in Institutions.

One finds throughout India boarding schools and hostels run by a variety of charitable and missionary organisations. Now many of these institutions are very poor; they often have to feed

children on Rs. 3 per head per month or less. It is difficult to provide a satisfactory diet for Rs. 3 per head per month, but, given the requisite knowledge and skill, the typical cheap

institutional diet can be greatly improved with little increase of cost. In many instances the substitution of ragi for a certain quantity of milled rice usually included in the diet and the addition of a few ounces of butter milk and green vegetables will serve to "Balance" the

diet, at least partially and the result will be an improvement in physique and health.

Here, then, is one field for public health nutrition work in India well worth cultivation.

Malnutrition among School Children.

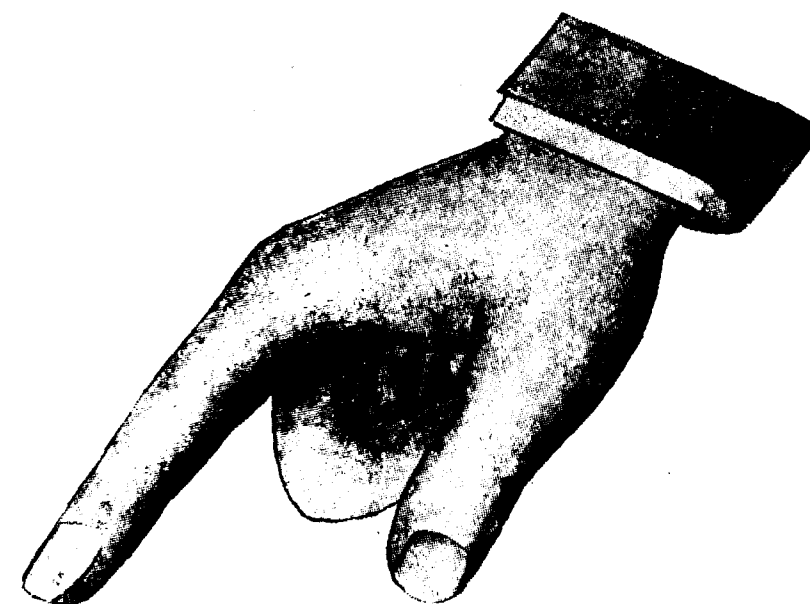
In India, a considerable percentage of children in schools suffers from malnutrition. A malnourished child has usually an apathetic look; its skin is muddy or lifeless; it is thin and under-sized for its age. The well-fed healthy child has a smooth glossy skin and bright clear eyes; in the ill-fed child, one often finds eye and skin troubles which call for treatment by cod liver oil or some similar preparation. A child suffering from food deficiency disease is not a satisfactory pupil; its brain is working with the wrong kind of fuel. If school authorities could learn to recognise when a child is suffering from the grosser forms of mal-nutrition, they could attempt to advise the child's parents how to improve its diet.

It would be an excellent thing if children in schools particularly those in the higher grades, were to be given elementary instruction in the principles

of dietetics. If children are well taught about diet, the knowledge will, to some extent penetrate to their parents and the children themselves will not forget all they have been taught as they pass through life. It is perhaps particularly important that girls should be given sound ideas about food and diet, because after all it will be their province to prepare meal for the family and they will be largely responsible for the feeding of their own children in infancy and childhood.

I look forward to the day when a few ounces of milk will be provided free or very cheaply to children in schools in the middle of the morning. In several countries of the world great efforts are being made to provide school children with supplementary meals and milk. I know that feeding on a wide scale in India would be difficult but nevertheless, the times may come when something of the kind will be practical politics.

YOUR DIET— WHAT IT SHOULD CONTAIN



SELECT Vegetarian
or Non-Vegetarian!

Select the following Vitamin Products which are essential for a good and nutritious diet and absence or deficiency of which would result in various disorders of the body.

VEGETARIAN

Bananas
Beans
Butter
Carrots
Cereal Grains
Cream
Fresh Apricots
Fruits
Grapes
Juice of citrus
fruits

Lettuce
Milk
Nuts
Onions
Peas
Pineapple
Tomatoes
Turnips
Water Melon
Watercress
Wheat Bran

NON-VEGETARIAN

Egg yolk
Haddock
Kidney
Liver
Lean meat
Salmon
Oysters

Take Care of Diet in Pregnancy

MATERNAL mortality has been of very great prominence in public discussions. Infection after child-birth is one of the chief causes. Careful analysis would show that Toxemia, poisons, bloodlessness and bleeding, kidney diseases and shock would take more lives than Sepsis. Modern investigations are on the channel of deficiency of diseases as a causative factor for bringing on Anæmia, Toxemia, etc. Faulty diet and faulty assimilation in the expectant mother either before the onset of pregnancy or during pregnancy, brings on weak resistance to diseases to the mother especially when the foetus drains maternal tissues. If the diet is deficient in supplying its

imperious demand, it seldom goes wanting; instead mother suffers.

Mal-nutrition is the pre-disposing cause for pulmonary Tuberculosis—the direct cause is tubercle bacillus. By providing good air, good food and sunshine, malnutrition could be overcome and tuberculosis cured. So also, it is quite possible that malnutrition is the predisposing factor for puerperal sepsis and this should be prevented by adopting the most modern treatment of fresh air and feeding. More women die a month or a year after conception as a result of malnutrition more especially from kidney diseases.

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The health of the average British man and woman and especially of the child, is better to-day than at any time since the Industrial Revolution. For every eight persons dying of whooping cough in 1901, one died in 1935. For every seven persons dying of diphtheria in 1901, two died in 1935. For every nine persons dying of scarlet fever in 1901, one died in 1935. And for every eight persons dying of measles in 1901, one died in 1935.

Public Health in Soviet Russia with Reference to the Protection of Mother and Child.

THE post-revolutionary period in Russia has necessitated the change of woman's position from one of defencelessness and servitude to one of full equality with men. To-day, the Russian woman takes part in the social life, public work, and in the Government of the state. Prior to the Revolution she was illiterate, to-day she has equal opportunity with men for education and work and when she marries she is not deprived of her job. She has special privileges regarding her care during and after pregnancy, should it occur.

The following measures were taken in this direction:

1. A series of laws for the protection of woman's labor.
2. The rationalization of woman's labor; its adaptation to the conditions and requirements of the female constitution.
3. A widespread extension of the institutions for the protection of children and also of public kitchens.

Women employed in manual labor are entitled to a leave of absence for eight weeks before and eight weeks after child-birth at full wages. Women employed in non-physical occupations are entitled to six weeks before and after child-birth. During these maternity leaves, women cannot be discharged from work. Expectant and nursing

mothers are not permitted to work at night or overtime. After the fifth month of pregnancy, women are not sent out of town on official business without their free consent. The pregnant woman is entitled to a single bonus for infant's clothing of one-half of the mother's wages when the birth is registered and afterwards, during the nine months, to monthly nursing benefits of one-quarter of her average monthly wage.

Russia has always had a high birth-rate. Before the Revolution one out of every three new-born infants died in the first year of life and approximately only one-half of all new-borns survived childhood. The mortality of children under one year has decreased about 30% and in some cities it has even fallen to less than half of what it was formerly. To-day a very high percentage of births is occurring in institutions. Before the Revolution, in the smaller villages, only 7% of all births occurred in hospitals. To-day the proportion of births in institutions in villages is about 20% and is almost 100% in the cities. The vast increases in the institutional care of the woman after labor is a development of the Soviet administration and forms an essential part of the programme of general policy. Care during pregnancy is greatly stressed. In every city there are special consultation centres for pregnant women, besides the health centres at the factories, which are in contact with the consultations for women and with the labor hospital.

The consultation centres are preventive and medical institutions with the following objects in view :

1. Medical and prophylactic assistance against disease during pregnancy, and after confinement, as well as during any diseases of the womb.
2. Advice, prophylactic information against disease, medical measures, with the purpose of protection of the future infant.
3. Participation in the work of the health centres in the planning measures, protecting the woman's health at work.

The consultations include the following subdivisions :

1. Consultations for pregnancy and confinement.
2. Consultations for womb disorders.
3. Consultations for sexual hygiene, where the women receive instructions in sanitation and the hygiene of marriage and birth-control information. They campaign against underhand abortion.

The consultation centre for pregnant women gives assistance free of charge to all pregnant women of its district. A staff of visiting nurses forms part of the consultation centre who visit the sick pregnant women in their homes and supervise all pregnant women regularly. They are in close connection with the stationary obstetrical hospitals. The doctors at the centres have the duty of fixing the date when the mother should stop industrial work, etc. On attendance at these centres, the expectant mother receives a card entitling her

to the right of precedence on tram cars and sheltered places in them ; to service in shops without waiting in line ; supplementary food rations and lighter work at her place of employment ; plus the maternity leave, with her wages.

There are permanent labor hospitals in cities and towns to serve all women. There is an increase of these hospitals by 136% in Cities and 146% in rural parts since 1925.

During her stay in the labor hospital, the woman is instructed in the care of the new-born, in breast-feeding and in her own post-delivery care. The doctors and nurses hold talks with the women in the wards and teach them how to handle the infants. After dismissal, she receives the address of the consultation centre for infants nearest to her home and advice to bring her child there in the immediate future. The Hospital informs the consultation centre about all mothers leaving the hospital and gives addresses and visiting nurses are sent to the home again.

When the woman goes back to work again, the nursing mother is entitled in addition to regular intervals at work, to special intervals of at least once in every three and one-half hours for a period of not less than one-half hour, for nursing her child. These measures insure the equality with men and also a social protection for women and children.

The problem of abortion has been linked up with the protection of women and children. Abortions have been legalized, a step that was found essential in order to combat the high mortality resulting from the practice of unskilled illegal abortion. The policy of the Soviet Government is explained as follows :

" During the last decade, the number of women who terminated their pregnancy prematurely increased here and abroad. The legislation of all countries struggle against this evil by punishing both the woman who is guilty of abortion and the operating physician. This method has been ineffectual. Abortions were necessarily done in secret and women became the victims of mercenary ignorant people who traded in the secret operations. As a result, 50% of women fell ill of infections after abortions and 4% of dangers of such a situation, has resulted in death. The workers' and peasants' Government, realizing the dangers of such a situation, has undertaken a campaign against secret abortions among working women. It foresees that this phenomenon will gradually disappear with the building up of socialism. But until now, the surviving traditions of the past and the heavy economic conditions of the present compel a good many women to have recourse to this operation. The Peoples' Commissariat of Health and the Peoples' Commissariat of Justice are convinced that methods of repression are completely useless in this case."

In order to preserve the health of woman and the interests of the race from ignorant quacks these two commissariats decreed that :

1. The operation known as abortion may be lawfully performed free of charge in Soviet hospitals where conditions guarantee a maximum of insury.
2. All persons who are not licensed doctors are strictly prohibited from performing abortions.
3. The midwife guilty of performing this operation is deprived of the right to practice and is liable to

punishment by the Peoples' Court of Justice.

4. The physician performing abortion in the course of his private practice with a mercenary purpose is liable to punishment by the same body.

To-day, abortions can only be done according to the following orders :

1. Abortions can be performed only by licensed surgeons in Government hospitals (Abortariums). Midwives are prohibited from performing this operation.
2. It must be the result of a surgical operation, and not of drugs.
3. The patient must afterwards remain in bed three days in the hospital or place of operation.
4. She must not be allowed to go to work for two weeks after the operation.
5. For a first pregnancy abortion is vigorously discouraged unless child-birth would endanger the mother's life.
6. Abortion is forbidden if the pregnancy has lasted for more than two-and one-half months.
7. A doctor cannot refuse an application for abortion except as in 5 and 6. He may however discourage it in any way he sees fit.
8. It is recommended that all abortions be performed in these State hospitals which have a division for this purpose. An insured woman or the wife of an insured man can claim abortion

free of charge in a State hospital. For others a small charge is made.

9. A private doctor, or anyone else producing an abortion which results in death, can be tried for man-slaughter. Women cannot be punished for performing on themselves.

10. The doctor is recommended to discourage the woman from abortion if there is no social, economic or medical reason for it, and particularly if the woman has fewer children than three, or has adequate means for supporting another child.

There has been widespread propaganda against abortions. Contraceptive knowledge and materials have been made fully available through the clinics as a preferable method of family limitation.

A statistical study of materials concerning abortion in the U.S.S.R. was undertaken by the Peoples' Commissariat of Health and lead to the following conclusions:

1. The legislation of the abortions has resulted in the stopping of secret abortions.

2. Out of every 1,000 women who had recourse to abortion in Moscow, the operation was performed out of the hospital in the following number of cases:

1923, 56.9%; 1924, 43.2%;
1925, 15.5%; 1926, 12.2%;
1932, 10.0%.

Free and legal abortions, performed in special hospitals by experienced physicians, have made it possible to considerably reduce the complications after abortion and to liquidate almost entirely the mortality.

The most important conclusive factors, however, are that the reasons which compel women to resort to abortion do not exist in the Soviet Union. The rising standards of living in the working class, the building of lodgings for workers, the extension of networks of creches and birth-control clinics plus the adequate living wages, all contribute to the fact that despite the growth of legalized abortion their total number is less than in other countries.

CARE OF CHILDREN.

Public nurseries have been established in Russia which admit children up to the age of four, the care of the child being transferred from the parents to those institutions. This is the result of the mass participation of women in

industry. There are tens of thousands of these nurseries and millions of children cared for. These useful nurseries relieve the mothers for industrial work enabling her to study and to take part in the social life of the country.

WORK IN THE NURSERIES.

The ordinary creche functions seven hours a day. The Government ones operate 10 to 12 hours a day and there are also day and night creches where a child may be cared for for several days in succession. There are special nurseries in villages during field work which are really covered wagons which follow the mothers out in the fields. There are creches for the nursing children in the factories. Entire country is covered with a net-work of creches.

A special regulation of the Government in 1932 expresses the enormous role of the creches in the economic plan of the country and points out their duties in regard to the development of the net work of creches. According to

this regulation, all new projects of plants and dwelling houses must include nursery accommodations.

Financial support of the new creche as well as building of new ones must be furnished by the new plants or by plants being reconstructed from the building funds. The Government makes the Central Supply organisation take responsibility for the proper supply of nurseries and special reserve funds exist for this purpose. The nursery work of the U.S.S.R. has thus become an obligatory part of the work of each factory.

In 1917 there were 4,920 infants cared for in day nurseries in the cities. In 1932, 879,900.

The following table shows the number of children cared for in the whole of the Soviet Union:

	1928	1929	1930	1931	1932
Towns and Industrial Centres...	31,935	39,923	59,949	122,644	206,491
Villages permanent creches ...	1,640	3,054	27,973	115,190	304,370
Seasonal ...	12,922	174,695	459,000	1424,753	3146,200

The child is brought to the creche at the age of 1 or 2 months when the mother's obligatory period of absence from work is ended, until it is 3 or 4 years old. Each creche can accommodate from 50 to 100 children. The children are arranged in groups according to age. Precautions are taken against infection, each child being striped when brought and clad in special clothes. If

the child shows signs of infection, it is sent back home and not readmitted until the health visitor has visited and inspected the home. If the infant is suckling, the factory working mother comes twice to nurse the infant during the working hours and once during dinner hour. Each child is kept clean and taught exercises and regular habits in regard to natural functions are begun.

Instruction in the proper use of modern sanitary facilities is given as soon as the child old enough to use them. The elder children are treated on the principles that nothing must be done for them which they can do themselves. After the child reaches the age of 3, it is sent to the kindergarten which takes the place of the creche, and at 7 years it goes to school.

In addition to the creche, an extensive system of milk kitchens for children requiring additional or artificial feeding, had been established. This supply of fresh milk and other foods, adjusted to the age and requirements of the child.

For children deprived of their own mother's milk, due to death, illness or departure, there are breast milk stations where mothers who have milk surpluses have this drawn from their breasts under hygienic conditions and medical control. These are the largest stations of the kind in the world. The Moscow Institute in 1928 and 1929 distributed 5,571 litres of breast milk.

Children's consultation bureaus exist, which educate the mother in the proper care of the child and the prevention of disease. Vaccination against infectious diseases is done here and also medical aid is given to sick children. The doctors at these stations watch the physical development of the child by routine weighing and measuring. Another feature of this work in the protection of mothers and children has been established and special waiting rooms in important rail-road stations. Each child travelling with its mother is given a medical examination here and in case of sickness is given treatment. Children remain in charge of special staff while mothers rest or attend to her business. Refreshment rooms are

also provided where the children receive proper nourishment suited for their ages at decreased prices. On long distance trains, special carriages for mothers and children are included which are equipped with showers for children, special departments for washing the baby's linen, drying cupboards and ice-boxes for milk and food and a special compartment where the child can play and be fed.

The above measures have reduced considerably the rate of infant mortality to what it was in the pre-revolution period.

The question of the care of the child by the State and the possibility of the break of the family bonds has been raised the world over, but the Russians claim that the affection is not lost on either side, because the mother is free from all irritation of trying to care for a number of children, while at the same time trying to carry on her household duties and social obligations, and she is better and able and more eager to devote herself to her children at the end of a short day's work. They also claim that the children are more anxious to see their parents and better prepared to enjoy them.

The Soviet system has also done a great deal of work in the attempt at the eradication of mental and nervous diseases, the approach to which has been novel both in the organisation and practice. It is novel in the fact that in Russia, psychiatry constitutes one of the links in the system of public health, occupying the same place as the treatment of all other ailments. Psychiatry has been proclaimed a part of the general system of health protection and the general principles of Soviet Medicine have become the rules of guidance for the psychiatrists too.

Provisions for Medical Care In America.

1. An uneven distribution in the costs of medical care among families.
2. A shortage of physicians and hospitals in certain rural areas.
3. A general shortage of convalescent facilities.
4. A general shortage of dentists to meet the real need of the people.
5. Inadequacy of personnel and financial support among official health agencies.
6. Inability of many patients to obtain nursing services because of the cost; actual shortage of nurses trained in obstetrics and public health. A surplus of private duty nurses considering the present inability of the people to employ them.
7. Extensive use of inferior types of treatment and widespread self-medication.
8. Low net incomes of many physicians, dentists and nurses.
9. Insufficient utilization of preventive medicine.
10. Inability of many people to differentiate accurately between good and poor medical service.

In Russia.

1. For four-fifths of the population in cities and a majority in rural districts, the uneven distribution of the costs of medical care has disappeared. It has not disappeared for the remnants of the 'deprived classes', or for the independent brain-workers outside any organization or their family, but these depend in the main on the same official system of medical care that is given to the manual workers and peasants and to the members of any of the various social organizations.
2. Shortage of doctors in the rural districts.
3. Well provided with convalescent facilities, though owing to the vast area, the rest house and sanatoria are unequally distributed.
4. Much greater shortage of dentists than in America.
5. Institutional and non-institutional medical provision for treatment is deficient in rural districts. In the cities, excellent treatment is available especially for the workers, and this treatment is almost completely integrated so that no form of treatment is lacking. Complete unification of medical

practice means an absence of redundant effort.

6. Shortage of nurses and inadequate training still is present. The fact, however, that the treatment of disease in Russia is chiefly institutional probably reduces the suffering from inadequate nursing.

In summary, we see then that Russia has a completely socialized medical service; that it has removed the doctor almost entirely from the field of monetary competition, abolishing an import-

ant source of inadequate medical service, that it has made gratuitous medical service, of an apparently complete character, available for the majority of the working population, and which is being rapidly extended to rural Russia; that it has given medical service a turn in the direction of social as well as medical preventive measures; that it has co-ordinated the various portions of the national medical service and that it is constantly attempting to raise the level of the doctor, the patient and the treatment. It is not yet a perfect system, and the results of its attempts remain to be seen, but it has many hopeful aspects.

—"MEDICAL LIFE," 1937.

Health Brevities

Persons living in or travelling to areas where the water supply may be polluted temporarily can assure themselves of a safe drink of water by adding a drop of iodine to each glass of water. A drop will make as much as a quart of water safe for drinking.

Suffering from asthma, from pains in the legs, from general weakness and failing memory, as well as from hallucinations, a woman was admitted to a London hospital. On advice she had been living on a starvation diet, consisting of a little brown bread and tea. The hospital gave her a diet, crammed with vitamins A and B. She improved at once, and it was proved eventually that all her symptoms were due to vitamin starvation. She has now been discharged cured.

More than 100 acts affecting public health have been passed in this country in the past twenty-five years.

—"Good Health," 1931

Don't be Lead Away

by Misleading Advertisements

on Patent Foods

ADDRESSING the Food Education Society at the annual conference of Educational Associations held in London on January 6th, 1938, Dr. MacPherson Lawrie said that the effort to improve national health was being partially frustrated by "a vast counter-organisation which lives on advertising and encouraging the consumption of manufactured and impoverished food-stuffs." On every side poverty was made the primary excuse for the wide prevalence of malnutrition; yet money that might be spent profitably on valuable food was increasingly enticed into less deserving channels by the sensational claims of uncensored advertisements. Certain food preparations were sound and their method of advertising was

justified and reasonable. A public inquiry undoubtedly would be to their advantage because it would remove unwholesome competition. Associated with the artificial food interests were the corrective-drug interests. All the manufactured food preparations were advertised with equal glamour and all promised health; nevertheless, the patent medicine department continued, increasingly, to sell the remedies in every home. Dr. Lawrie asked for some official guarantee of value. The public was in the dark; it could not easily sort the good products from the bad, and in consequence as often as not, it paid through the chemist's shop the initial tax of ignorance.

—"THE LANCET," 1938.

Breast Feeding Lowers Infant

Death Rate

For more than twenty thousand infants in Chicago (largely of foreign parentage), between 1924 and 1929, Drs. Grulee and Sanford have compiled figures showing that those who were fed from the breast had a 50% better resistance to all types of diseases than those

artificially fed (even under a physician's advice); while the death-rate of the latter was from two to twenty times as high, in different classifications of disease. Nature seems to be still the best dietician.

Know, What is Cholera

AND

Prevent it

CHOLERA is a dangerous communicable disease. Its important features are:—Violent vomiting and purging accompanied by cramps, stoppage of urination and terminating in a large majority of cases in death.

Cholera is caused by an organism called the comma bacillus which gains entrance into the body through contaminated food and drink. This organism is discharged in large numbers by the sick person in his vomit and motions.

After infection, the disease may develop within a few hours to five days. The first sign of the disease is looseness of bowels. Very soon, the frequency of motions increases. The motions become rice-water-like in colour and consistency. Later, the patient ceases to pass water. Vomiting also increases in frequency and the patient is prostrated and takes to bed. His eyes become sunken, cheeks drawn in, causing a pinched-up expression of the face. The tongue is dry. Cramps develop in the muscles, especially in the abdomen and calves due to excessive loss of fluids from the body.

The chief modes for the spread of Cholera are:

1. *Water*.....that has been contaminated with cholera germs. Sudden and severe outbreaks of cholera in a community are often traced to a contaminated public water-supply.
2. *Contaminated food, milk and other drinks* Contamination occurs when persons attending on cholera patients carelessly handle articles of food without washing their hands that are soiled with the vomit and motion of the patient.
3. *Flies*.....These sit on the vomit and excreta of the cholera patient, carry the filth on their wings, legs and body and deposit it on the articles of food which they alight on.

Cholera is a preventable disease, provided the following rules are observed:

1. Report early all suspicious cases to the health authorities.

2. Keep the patient in a separate room and prevent other members of the family from coming into contact with the patient.
3. Keep apart a set of utensils exclusively for the use of the patient.
4. Collect vomiting and motions of the patient in a receptacle, put some straw into it, pour a little kerosene oil and burn it.
5. Do not wash the clothes and utensils used by the cholera patient in a tank, river or pond or any source of water-supply.
6. Keep the articles of food in vessels properly covered, so that flies cannot get access to them.
7. Eat hot food. Never fail to boil the water and milk before use.
8. Keep the house and its surroundings clean. Burn all rubbish. Remove and bury manure.
9. Wash your hands well before taking food.
10. Do not eat sweetmeats, cut fruits and other things kept exposed in the shops.
11. Get all the people in the house inoculated with anti-cholera vaccine. Inoculation affords protection against cholera for at least six months.

—“Health,” 1937.

PUBLIC HEALTH SERVICE

Time has now arrived when a large number of private medical practitioners could be employed on Honorary basis in Public Health work. Mention has already been made by the Ministry of Health in Madras, of the need for such co-operation.

Public Health work could be made easy if such co-operation from medical practitioners is encouraged by affording laboratory facilities to them in order to

arrive at correct diagnosis of cases which is the basis of successful treatment.

“The time is not far distant when the health services will in large measure be staffed by general practitioners on a part-time basis, working scheduled hours.” “It is useless to expect doctors to take an interest in medical services in which they cannot take a responsible share.”

Smokers and Savings

It has been estimated by the Director of the Stanley Institute that the average smoker gets through twenty cigarettes a day. At this rate, if he begins to smoke at the age of twenty, by the time he is fifty, he will have spent on cigarettes not less than £ 547, 10s.—exclusive of interest.

—“Good Health,” 1938.

Familiarity Breeds Contempt

The Death-Toll of the Roads

DEATHS from violence have increased rapidly in post-war years, and as the public are well aware most of the deaths are due to motor accidents. What many of the public are not aware of, however, is that a contempt of road traffic has been unconsciously developed in them. People still rush out from cover behind another vehicle to cross a busy street, and old people still meander in a crowded highway amidst a maze of traffic, although they are not in full possession in the highest degree of their faculties, nor are they agile enough to get out of difficulties.

Many cyclists seem to be possessed of a madness to race other traffic or take unnecessary risks in "cutting in." Some children still dash blindly across a main road from side streets or pavements. Many motorists would have been better never to have driven a car at all as they have neither the suitable temperament nor sufficiently quick reflexes to act safely in an emergency. With it all the appalling slaughter still continues.

If people would have patience and use the proper road crossings and

drivers would proceed with caution through restricted areas, no doubt the toll of accidents would be less. Unfortunately the majority of people only use the proper crossings if they are within a stride or two of them; if not, they will not take the trouble to use them.

A speed limit for drivers is almost useless as a means of diminishing accidents unless it is allied to caution and anticipation and fitness in every way to deal promptly and successfully with a situation which threatens the occurrence of an accident.

People have grown contemptuous of road traffic through familiarity, since their nonchalant attitude quickly disappears if the same people happen to cross a railroad, although it is obvious that there is far less danger on the latter than on the roads or streets. It is clear also that our roads and streets cannot cope with our present-day motor traffic without the element of risk of fatality being always present.

—"Better Health," 1937.

BIRTH-CONTROL

You Must Know What It Is

SURELY it is the right of every human being—of every mother or prospective mother—to determine how many children she shall have, instead of the reckless, indiscriminate bearing of yearly children so often seen in the homes of the poor? We can, and often do, limit the offspring of our animals and pets, and yet there are some who would deny this to the human being—where the question is infinitely more vital. They, too, may have the haven of Euthanasia—but *we, no*. When discussing Birth Control, it is futile to bring in the question of "morals": it is practical common sense, and is a thousand times more "decent" and humane than following the customs that exist amongst rabbits. They are not civilised and know no better; we are supposed to be civilised and should know no better. Were these unhappy yearly breeders amongst women living healthily, eating healthily, and doing all else healthily, the matter might be different; but under their existing conditions it is little short of criminal that, for the want of a little essential knowledge, children should be allowed to be born to semi-starvation, disease and death—the latter being, alas, too often their kindest fate.

In knowledge there is no dishealth, but in ignorance there is much. It has often struck me how wrong it is in every

way that some women—too often, alas! hopelessly unequal for the struggle—should be condemned to live the best years of their lives in an almost chronic state of pregnancy—suffering discomfort, pain, anguish of mind, illness and, again, often death. When, by a little knowledge, the vast bulk of it all could be averted! These women are nothing more or less than the hopeless victims of our prudery: our untempted smugness; our Victorian stagnation that lives on decay and disease and death.

Why should the knowledge of sex and control of reproduction be kept from those who require it most? They are taught about their teeth and digestions and all other things; but to teach them about that highest and most sacred of functions—the science of reproduction—that would "just never do." However, on this subject the public have taken the bit in their own teeth, and there will be no stopping them either by preachers or by prudes. And by the knowledge they will gain there will be saved a world of suffering both mental and physical; again laughter will reign in the poverty realms of the world, and the eternal, and often wrongful, child-bearing be brought into a sense of decent proportion.

—A. GRAHAM STEWART,
M.B., Ch.B.

Use of Water in Health and Disease

As a sedative: Tub-baths are given.

As a tonic: A brief cold shower is well known.

As a diuretic: A small quantity of ice water is drunk while outer applications are given.

As a diaphoretic: (to increase sweating) The hot bath is employed.

As an emetic: (to induce vomiting) Large draughts of tepid water have long been administered.

As a purgative: The use of Enema is familiar.

For the promotion of Metabolism: (Stimulation of general bodily functions) Certain procedures in which water is employed are extremely useful.

As an aseptic: Boiled water is used.

As an antiseptic: Steam is used.

As an agent to reduce fever: The prolonged bath of 95° to 100° has established itself as a superior to medicinal agents.

As a hypnotic: (Soothing Agent) The wet pack has no superior.

Water treatment is so common placed that its efficacy is often underestimated. Interesting developments in the water treatment of disease dates to the time of the recent world war. French Surgeons found that they could increase the circulation and reduce pains of wounded arms of soldiers by immersing them in amputated stumps in bubbling aerated water.

TEA AND DIGESTION

THERE are many conditions of the alimentary canal and digestive functions which call for the withdrawal from the diet of foods difficult of digestion, and beverages that are inimical to hydrolytic cleavage of food factors by the digestive ferments. Among the latter, Tea is often forbidden in the patient's diet.

The offending constituents in Tea that are inhibitory to ptalytic and peptic digestion are the tannin compounds which definitely slow down the enzyme action.

The percentage of tannin in the Tea leaf varies according to

1. *The age of the foliage:*—Stalks and the older leaves give the higher proportions of uncombined tannin.
2. *The area of the leaf:*—Edges, tips and points give less tannin

than the base and central parts of the leaf.

3. *The zone of growth and production:*—Generally China Tea gives less tannin than the Ceylon, Indian and Assam varieties.

The percentage of tannin in the fusion also varies according to the period of infusion.

As the caffeine in Tea—the exhilarating principle is more soluble than the tannin and goes into solution mostly in the first five minutes in China tea and three minutes in other teas, there is no point in prolonging the preparation beyond that time, as the percentage of undesirable tannin is rising, without a concurrent increase in the caffeine.

In tea infusion, the caffeine combines with tannic acid to form a compound which is not deleterious to digestion. It is the combined tannin which exercises the inhibitory action in digestion.

Unhygienic Exposure of Foods.

THERE is still far too much carelessness in the manner in which the people's foods are handled, and it is quite obvious that what is really lacking amongst a large number of persons engaged in the food distribution trades is the exercise of a greater measure of commonsense and pride in their important occupations. If only the small retailer generally would develop the same regard for the simple principles of hygiene as many of the bigger food-producers there would perhaps be little

to complain of. The practice of displaying food outside shops in such a way as to invite fouling by dogs is not only disgusting but definitely dangerous to the public health. If customers would refuse to purchase under such conditions the practice would cease. These remarks apply more especially to the sale of vegetables.

—MR. H. HORNBY,
Senior Sanitary Inspector, Batley.
"Better Health," 1937.

Watching the Weight.

WHEN the child is born we recommend that it should be kept under frequent medical supervision so that accurate records of its weight can be noted. It is only by a correct interpretation of the weighing that we can say how the child is progressing, and, at this stage it is also essential that we should be able to advise the mother as

to the proper method of feeding her baby, because injudicious feeding in the early months may lead to irreparable damage later on.

—DR. J. R. SAMSON, M.H.O.
(Ramford).

—*Better Health,*

A Health Prayer.

Give me a good digestion, Lord,
And also something to digest;
Give me a healthy body, Lord,
And sense to keep it at its best.

Give me a healthy mind, good Lord,
To keep the pure and good in sight,
Which, seeing sin, is not appalled
To find the way to set it right.

Give me a mind that is not bored,
That does not whimper, whine, or sigh;
Don't let me worry overmuch
About the fussy thing called "I."

Give me a sense of humour, Lord;
Give me the grace to see a joke,
To get some happiness in life
And pass it on to other folk.

—HEALTH PROPAGANDA BOARD, MADRAS.

JUNE 1938

HEALTH AND WRESTLING

THE Madras public would not have failed to observe the robust health of the various wrestlers of international repute that took part in the recent International Wrestling Tournament held at the Y. M. C. A. Grounds.

A close observation of the actual feats and the physical health of the competitors should convince one of the immense benefits of wrestling exercises in maintaining the health of the body and mind.

Unlike other games, like Cricket, Tennis, Football, etc., which no doubt have their own good things to boast, wrestling exercises have got the unique feature of bringing a uniform development of the body. Common sense would tell us that cricket develops the arm muscles the concentration being either to hit or catch the ball. The running exercise is only secondary. In Football you exercise the legs, the aim being to kick the ball in a certain direction. In Tennis your hands get exercised most. So also feats on the horizontal bars. This is not the case in wrestling. The aim here is to put the opponent down in a particular

posture. This would give tremendous exercise both to mind and body. Almost all the muscles of the body are exercised. The various grips, kicks, joltings, fistings, crosses, somersaults would leave no muscle tendon or joints unexercised. Besides the skill, knack, tact, patience evinced to escape from the folds of the opponent and retort would show how the mind also gets exercised. The wrestling exercises are very popular and unharmed and economical. You depend for the success on your own physical health and skill in the use of arms. You don't require a ground, bats, balls, etc., as in other games and which usually cause in some way or other serious injuries. Wrestling is an exercise which you can practise daily at home. The recent competition might have stimulated the latent faculties of your kiddies who we know have been imitating these exercises almost daily in our homes. If proper facilities and encouragement are given to our young men to take active parts in Wrestling exercises and make each of them a "Harbhan Singh or King Khong" we would no doubt be laying a strong foundation for the growth of national strength and well-being.

HEALTH PROPAGANDA BOARD.

Public Telephones and Tuberculous Infection

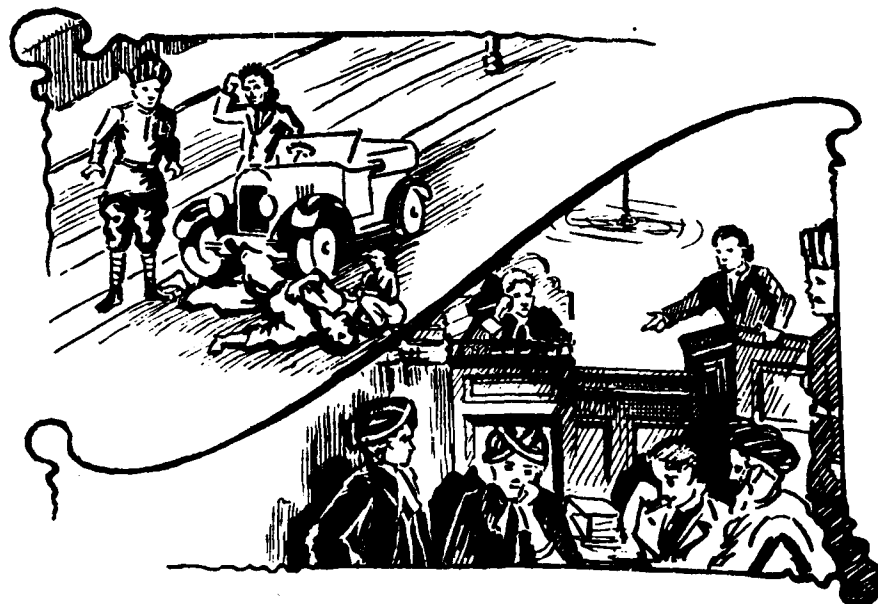
Mr. Robert Gibson asked the Postmaster-General if experiments had been made by officials of his department for the purpose of discovering whether or not tubercle germs were present in the mouthpieces of telephones in public kiosks which were, and were not, cleaned every morning, respectively, by an attendant; and, if so, with what results Major Tryon replied: Investigations of the kind in question have been

repeatedly undertaken in this country and in the United States by independent bacteriologists at the instance of public health and other authorities. They are unanimous in concluding that the risk of tuberculous infection from the use of the telephone is negligible. This conclusion was verified by the Post Office medical department by means of separate research.

—LANCET, 1938.

DRINK AND DRIVING

Prevent Accident



Be Free from Worry and Trouble

"Two or three ounces of whisky, which is a comparatively small quantity, have been shown by psychological tests to diminish attention and power of control, to reduce the capacity to learn, to affect adversely the reasoning powers and to affect the powers of making movements dependent upon rapid and accurate co-ordination.

The curious thing is that drivers of motor-cars often think that their powers are improved by taking alcohol, and that they are quicker in seeing what goes on around them and are more skilful and ready in the driving of their cars. That feeling is an illusion because it will always be found that the taking of alcohol affects the qualities which are necessary in the driving of motor-cars."

—"Good Health."

When "Temper" Goes Up, "Reason" Goes Down.

Self-control is Job-control.

Gas Warfare

You Should Know What It Is.

ACCORDING to a recent issue of a business directory there are at least ten firms manufacturing gas masks, protective clothing and other goods connected with gas warfare. These will, however, avail little if the civilian population fail to learn essential information as to their use, and what other precautions they should take in case of air attack. It is therefore the responsibility of all to secure this necessary knowledge.

There are several terms used in connection with war gases which are not quite clear to the layman. We hear, for instance, of a solid gas and a liquid gas, both apparent contradictions of terms. For the purposes of aerial warfare, however, a "gas" is any substance, solid, liquid, or gas, which is dropped from the air for the purpose of inflicting harmful or poisonous effects on the human body.

Much has been said concerning the terrors of gas warfare, but to allay unnecessary fear it may be stated that while the number of casualties may tend to be high the number of fatalities may be very low indeed. Poison gases in themselves are not as fearful as many people imagine. Much of the harm that results can be avoided if panic is controlled and proper precautions taken. The great danger is a combination of high explosives and poison gas.

But what if the masks are unsound? Has it not been proved that they offer

no protection against that deadly gas, carbon monoxide? This is true. But as this gas is just about as heavy as the air, it would be quickly dispersed by the slightest wind, so that its use in warfare is extremely unlikely. It is actually present in appreciable quantities in the exhaust of motor vehicles without doing any harm except in the absence of proper ventilation, and such a condition is hardly ever likely to obtain in the open air.

There are one or two other gases also known, against which the present masks offer no protection, but these are only what we might call "laboratory" gases. Being expensive to manufacture, it is extremely unlikely that these, either, will find a place in chemical warfare.

War gases are divided into four groups :—

1. *Tear gases.* These produce immediate pain in the eyes. There is a profuse flow of tears and apparent blindness. The effects, however, pass off very quickly when the patient is removed to pure air. As these gases affect only the eyes, complete protection is afforded by the respirator. In warfare they would be used chiefly to produce panic. Hence the value of an understanding of the true facts.

2. *Nose irritants.* These produce great pain in the forehead, throat, nose, mouth, and in the upper part of the chest. Here again the mask affords

complete protection. But one thing must be borne in mind. The symptoms may continue to become worse after the patient has been removed from the contaminated locality. The same thing happens when the patient puts on the gas mask. Thus he may be led to believe that his mask is leaking, and may wish to discard it. This, of course, he must on no account be permitted to do.

Another prominent symptom of nose irritant poisoning is profound mental depression. This may even amount to a desire to commit suicide. So the patient must be carefully watched and encouraged.

3. *Lung irritants.* These gases produce definite injury to the lungs. Symptoms of this form of poisoning are tightness in the chest, difficulty in breathing, vomiting, and coughing up quantities of froth.

As life itself is in danger, the patient simply must not walk about or engage in any other form of physical exertion.

Complete rest and warmth and early removal to hospital are the usual steps in the first-aid treatment. Even should breathing seem to be failing, artificial respiration must not be carried out, or serious injury to the lungs may ensue.

4. *Blister gases.* The gases in this group produce the worst results of all because (a) they are liquids, and both the liquid and the vapour they give off are exceedingly dangerous; (b) while other gases disperse after a reasonable lapse of time, mustard gas, the chief member of this group, remains active for an amazingly long time. A brick, having been splashed with mustard gas, could be buried in the ground

for three months, and on being dug up would continue to give off poisonous vapours; (c) a respirator does not give complete protection because they will affect any part of the body with which they come into contact. Eyes, nose, mouth, skin, respiratory passages, or the digestive tract—all suffer grave injury if exposed to the liquid or vapour for a very short time.

Another grave danger from blister gases arises from the fact that effects are not apparent, in some cases, for several hours after the person has been gassed. Mustard gas, too, has a smell to which one quickly becomes accustomed, so the person may be entirely ignorant of the fact that he has been gassed.

If, therefore, a person has the least suspicion that his hand or arm, for instance has been in contact with a blister gas, he should take no chances but immediately seek skilled help. If this is not available he should scrub the affected part with soap and plenty of water till the skin becomes quite red.

Knowledge of these simple precautions helps to reassure us in the face of the air menace, as also does the fact that careful plans are being laid by the Government and local administration to meet such an emergency. We may, however, well pray that these islands may longer be spared from the horrors which another war would inevitably bring.

—EDGAR A. WARREN

(Watford St John Ambulance
Brigade.)

"Good Health," 1938.

Health from Baths.

Medicinal baths are as old as civilization. The Romans developed them with every degree of refinement and to-day baths of many kinds figure prominently in the practice of healing everywhere. Ian Harman describes the simple uses of various baths at home and their value in minor disorders—soda-and soap-flake, Epsom salt, pine sea salt among others.

ONE does not usually associate the act of having a bath with definite health measures. The average person takes a "tub" because he enjoys it and knows that afterwards he will feel refreshed and invigorated. And what more welcome sight could there be than a bath of hot water, a tablet of fragrant soap, and clean towels when one is tired after a day of hard work in the home or office?

There can be no doubt that the simple act of taking a bath can prove a very health-giving action. But it must not be supposed that having a bath is only of benefit to our health in that it is a means of removing dirt, "the mother of sickness". Nor is the usual bath, with perhaps a few bath-crystals thrown in, the only kind of bath we can enjoy in our homes.

There are all kinds of bath treatments you can take, according to how you happen to feel or what particular result you are anxious to achieve. With a little imagination and trouble one can indulge in baths with a distinct medical value at very small cost.

For instance, a soda and soap-flake bath is excellent for the relief of rheumatism. Prepare the bath by adding a teacupful of ordinary washing soda and the same quantity of soap-flakes to the hot water, and then beat into a lather

with a stick. To get the full advantage of such a bath you should lie with the water right up to your neck for at least ten minutes, and the bath must be hot.

Then rub your body vigorously with a rough towel and go straight to a warm bed. It is advisable to sleep in blankets after this bath.

Epsom salt baths are very helpful indeed in cases of chronic rheumatism, and also for persons who suffer from poor circulation. They will remove all the strain caused by muscular exercise, and when taken twice weekly are excellent for getting rid of those extra inches which you feel you do not need.

The mixture should be prepared before it is actually required for use. Mix four pounds of common salt, one pound of Epsom salt, and a dessert-spoonful of Tincture of Iodine. These ingredients should be well mixed together and placed in a wide-mouthed jar with a close-fitting bung or screw-stopper. A teacupful should be added to the bath water and allowed to dissolve.

Prepared Epsom salts for tonic baths can be obtained from any chemist, and perfumed for feminine use. If you are taking an Epsom salt bath for slimming purposes it should only be indulged in at bed-time. Take it really hot, and

stay in it rather longer than you would do ordinarily. Therefore it is very necessary to go straight to bed afterwards, to avoid catching cold.

A hot bath is one of the best ways of warding off a threatening cold. To get the best effect you will require the soothing influences of bran and Eau-de-Cologne. To prepare this bath, put a large teacupful of bran into a muslin bag, and pour over it two tablespoonfuls of toilet Eau-de-Cologne. Tie loosely, and sponge yourself over thoroughly with the bag. After the bath you will, of course, get into a warm bed as quickly as possible. This bran and Eau-de-Cologne treatment is particularly beneficial to those women who suffer from an oily skin, or from excessive perspiration and closed pores, and quickly dissolves the fatty substances which prevent a clear and smooth skin.

Pine baths are also splendid for people who suffer from colds in the chest or chronic catarrh. All the old herbalists described and made use of pines and pine oil, and baths containing the crude pine oil are a favourite remedy in Hungary today, being used in cases of insomnia and nervous complaints. Pine bath salts are obtainable from any chemist; and these are prepared from the white pine, which, owing to its balsamic properties, is excellent for colds and chest troubles generally.

You will find a pine bath just the thing to give relief to aching limbs after a hard day of work or play. Take the bath as hot as you can bear it, and late in the water until it gets cool. Then rub down briskly, and do some touch-your-too exercise. Wrap up well, and your aches and pains will have vanished.

An ammonia bath is particularly refreshing and bracing. You can

make the mixture at home by melting a tablespoonful of soft soap in hot water and adding to it an ounce of ammonia solution. This quantity is sufficient for one bath.

Two large cupfuls of sea salts, which can be bought very cheaply at the chemists, form the basis of a most invigorating bath. A hot sea salt bath is not taken nearly so often as it might well be, as these baths are an all-round tonic when you feel the exhilarating effects until about half-an-hour after taking the bath. After getting out, women readers will find it a good plan to sprinkle some Eau-de-Cologne on a loofah and rub down with this vigorously.

If you suffer from insomnia and feel restless and irritable at night, try a camomile and lime flower bath. Put equal quantities of the flowers into a muslin bag and use it as a sponge. In some parts of the country villagers put a weak mixture of vinegar and some thyme into baths taken before bed-time, and is said to be a sure inducement to sleep.

To get the opposite effect—to ward off fatigue—there is nothing like a herb and salt bath. Take a handful each of mint thyme sage, rosemary, rose petals, pink petals, and lavender leaves, and put them into a jug of boiling water, adding to it half a teacupful of ordinary salt and two tablespoonfuls of bicarbonate of soda. Leave these ingredients in the boiling water for about five minutes, and then pour into your bath. This bath is very fragrant and finely refreshing. It is a good plan to soap yourself down, and have a rinse under a shower where possible, before getting into this herbal bath, as it is essentially one in which one lies at peace for a few minutes.

—*New Health*, 1937.

BUILDING HEALTHY TEETH.

FOR children to enjoy the crisp dry cereals, the raw fruits and the vegetables we advise so regularly, they must possess good teeth with which to eat these foods. Natural, unspoiled foods require much more mastication than to soft, ready prepared foods before they can be comfortably swallowed. Apart from their utility, nothing so enhances a child's face, or any one else's for that matter, than strong and even little teeth.

English people have been caricatured often in continental newspapers by the caricaturist giving them two large and prominent front teeth. This ugly type of dentition is very prevalent, and it is almost certainly due to the faulty food that English babies and young children have been reared on. If the teeth are prominent it is usually because the jaw is imperfectly formed and malformation of the jaw, teeth that decay quickly, and rickets are all associated evils resulting from faulty diet.

The Four Parts of a Tooth.

A tooth is composed of four main parts. Firstly, there is the very hard enamel on the outside of the tooth, above the gum. The main bulk of the tooth is made of a substance called dentine; in the centre of the tooth is the cavity containing the nerves and the blood-vessels; while the part of the tooth below the gum is covered with cement.

In order to possess good teeth, several things are necessary but the most important of all is that the blood shall contain enough of the necessary mineral constituents. If the blood does not contain enough calcium and other mineral salts, teeth will still be formed,

but their structure will not be so good, and consequently they will decay more easily than would a perfect tooth.

The microscopic structure of a properly formed tooth shows that the cells are evenly formed, and regularly packed like a well-built brick wall, while the microscopic structure of a tooth formed from a deficient blood-stream shows that the cells are irregular, and more like a pile of rubble.

Importance of Calcium and Phosphorus.

It is easy to understand from this why teeth built from blood that is deficient in certain elements will decay easily. Not only will the teeth show this lack of perfection, but the rest of the bones will also suffer, and in serious cases the result is rickets.

It has been shown that calcium and phosphorus are two of the most important minerals necessary for forming good teeth, and the natural foods such as fruits, vegetables, and milk are rich in these mineral salts. An excess of starch foods or refined sugar is definitely bad for the teeth, and no amount of washing the teeth after meals or after eating sweets will remove the damage done by an excess of these foods. Every normal person must have some cereal foods, but these should be balanced by other foods rich in mineral salts. Only in this way will the body receive enough calcium to balance the inevitable calcium wastage and, in addition, still have enough left with which to build good teeth.

Foods for Growing Children.

Children, of course, with their permanent teeth to grow, and with so much bone to form, need particularly

large amount of these salts. This is one reason why fresh, unboiled, and unsterilised milk should be included in every child's diet, as unspoiled milk is one of the best sources of organic calcium. (The addition of inorganic lime water does not help.) Quite spectacular results in improved growth appear to have resulted from an increased daily consumption of milk by children. All the same, it is possible to overdo the milk ration, and sometimes ill-health is directly due to a child having too much milk. No normal child even when fed on Diet-Reform meals, should have less than half a pint of milk a day, and most children should have a pint. Individual cases of splendid children, being reared without milk do occur, but usually extra special attention is paid to their diet. Milk is a food, and should form an integral part of a meal, and not, as is often the case, an extra to be taken between meals.

Part Played by Vitamins.

Although a proper supply of calcium and phosphorus in the blood is essential for good teeth formation, it is not, by itself, enough. There must be, in addition, the accessory food factors known as vitamins. Vitamin C and Vitamin D are the two most important for teeth. While followers of a Nature-Cure diet will derive plenty of Vitamin C (from their fruits and vegetables) there is still a tendency for children not to have enough Vitamin D in their food. It is therefore, a wise precaution to give a daily ration of some good Vitamin D preparation to every child and baby, except breast-fed babies, whose mothers should have it in their own milk in sufficient amount if their diet and habits of living are correct.

An addition of Vitamin D is often more important than an increase in the intake of calcium, for it facilitates the utilisation of calcium by excretion. If there is not enough Vitamin D in the system, additions of calcium to the diet will be ineffective.

Since the foundation of the teeth is laid in the pre-natal and nursing periods of an infant's life, it is most important that expectant and nursing mothers should have a diet rich in mineral salts, with a sufficiency of Vitamin D.

Similarly, if babies suffering from rickets are given enough Vitamin D (not too much), their condition improves remarkably, because their bodies are then able to use the calcium which before they failed to use.

The body is never stationary, as it is being remade continually as soon as the blood stream is enriched with extra mineral salts. Nature at once begins to repair faulty structures such as badly calcified teeth.

The "Wastage" of calcium which occurs with the eating of cereals is another very good reason for not giving cereal jellies, etc., to babies, whose need for calcium to make their bones and teeth is so great.

Children's jaws should have plenty of exercise, for this increases the blood supply flowing to them, improving the teeth and strengthening the jaws, and thereby helping them to develop normally. Children should have hard dry toast and crispbreads and crusts to eat, because these foods enforce "jaw exercises."

DOCTOR WISE.

"There was a MAN in our Town

He was a Doctor Wise—

Who wanted folks to keep quite well

And as he did advise,

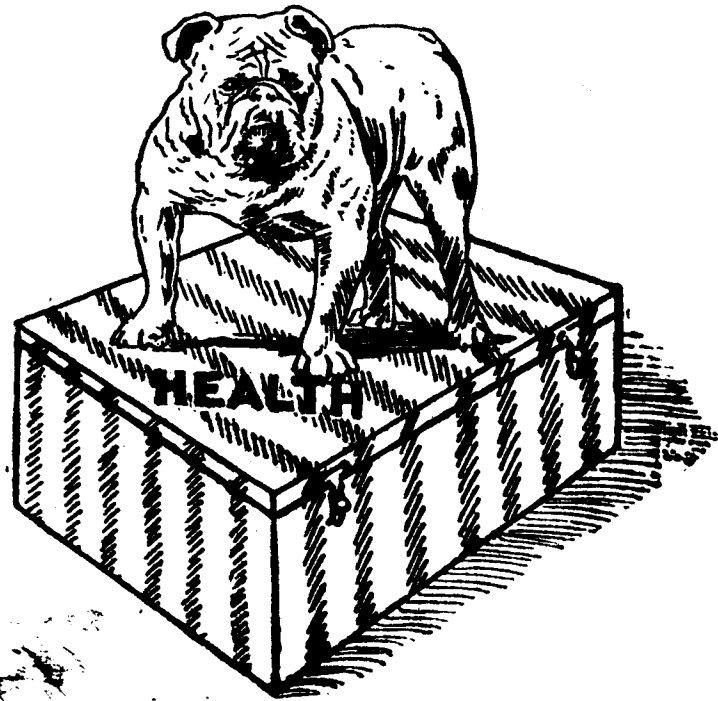
Fresh Air, Good Food, and lots of Sleep.

With merry times each day

And all the folks followed him

Were Happy, Well and Gay."

—Metre Life I Co.



**Is a Treasure
That Needs Well Guarding**

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