



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

SUBSCRIPTION
Rs. 1/4 per annum

"PANTHEON GARDENS"
PANTHEON ROAD
EGMORE :: MADRAS

Annas Two
per copy

Kogya - Margam

b1-1

NO-1.2.

April, May-1938



52
L-5m211, N38
N38-1.1-2
1/50 413

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.

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
"Arogya Margam"

Size: ROYAL OCTAVO

	Full page.	Half page.	Quarter page.	One-eighth page.
Per Insertion	Rs. 25/-	Rs. 15/-	Rs. 8/-	Rs. 5/-

30% extra back cover page; 20% extra on inside cover pages;

Coloured Display of Advertisement extra.

Rebates of 2½%, 5% and 10% for 3, 6 & 12 insertions respectively.

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.

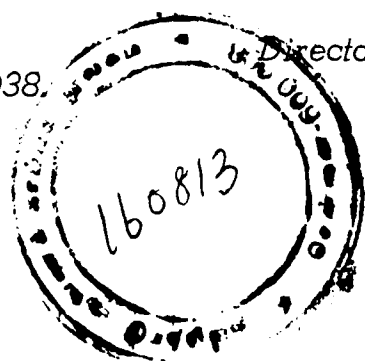
2. The objects of the Madras Health Propaganda Board being the stimulation and promotion of interest in, and knowledge of, all matters connected with the general and personal health of the population of Southern India, the journal "AROGYA MARGAM" which the Board proposes to publish will, it is felt, 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.



7L

L-5-11, N38

N38-1-1-2

CONTENTS

	Page		Page
1. Ourselves (<i>Editorial</i>) ...	1	16. Do not Commit Nuisance ...	21
2. History and Origin of H. P. Board ...	3	17. A Message from the Minister of Health ...	22
3. Colds and Sore-throats in Infants ...	6	18. Crowded Halls and Infections ...	23
4. Noise and Public Health ...	8	19. Atmospheric Pollution ...	23
5. The Craze for Quack Medicines ...	9	20. Education of the body in Public Secondary or Preparatory School ...	24
6. What is Malnutrition? ...	10	21. Bad Nutrition ...	24
7. The Four Fundamentals to Long Life and Immunity from Disease ...	11	22. List of Leaflets ...	25
8. What is Small-pox? ...	12	23. Classified Table of Publications ...	26
9. Care of the Mother ...	13	24. Protection Against Diphtheria ...	34
10. Milk in Schools ...	14	25. Daily Exercises ...	34
11. Our Children in Their Teens ...	16	26. Humors and Vapors ...	35
12. Fruit Juice Tonics ...	17	27. To Prevent Ill-Health ...	36
13. Apple—Its Place in Diet ...	18	28. Drink and Driving ...	36
14. Do not Spit ...	19	29. Advertisement Rates	
15. Does Tuberculosis Really Run in Families? ...	20		

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.

Health Propaganda Board, Madras.

(REGD.)

Chairman:

1. M.R.Ry. S. MUTHIAH MUDALIAR Avl., C.I.E., B.A.B.L.

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 cognisance of the immense harm to the public by the undue noise, that is being caused in our City. Its bad effect both on the children'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 pathsome 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.

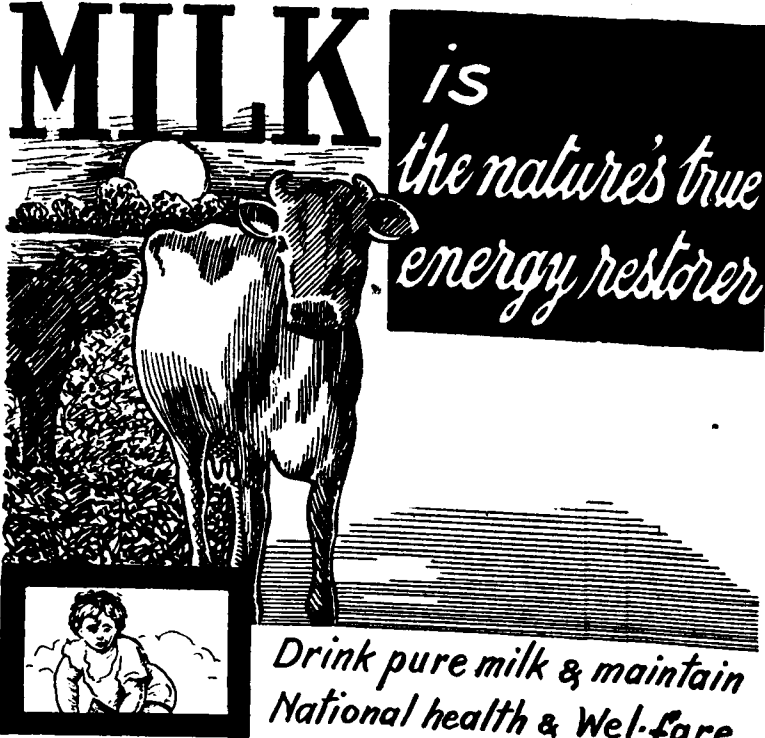
—HEALTH PROPAGANDA BOARD, MADRAS.

MILK

MILK

IN

SCHOOLS



is the nature's true energy restorer

Drink pure milk & maintain National health & Welfare

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."*

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 parts 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.

B. FRUITFUL

Fruit is the "Tonic-sol-fa"

In the scale of Health

Fruit removes tartar from Teeth

and tartar from the temper



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 havocs 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.

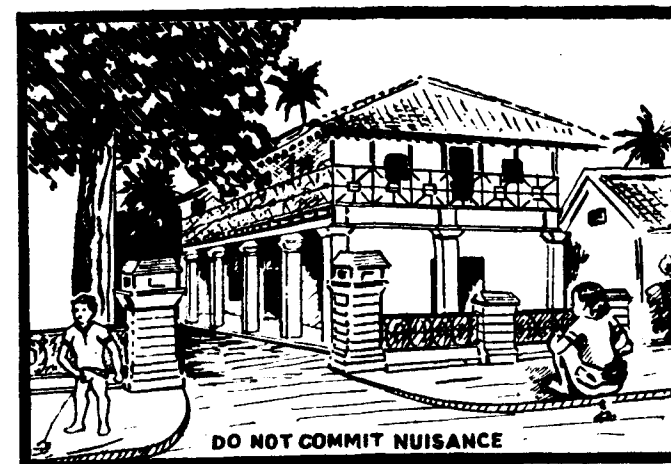
It may happen also that a single close contact with a person who has the disease is enough to cause serious infection. A visitor to the home, for example, who kisses the children may plant the seeds of this disease in that home. For this reason, then, no home is safe until all homes are safe.

—*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.)

ASSN., AUTHOR OR TITLE.	FORM.	SUBJECT.
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"
Dr. G. V. James, M. D.	Pamphlet (Tamil)	"
	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

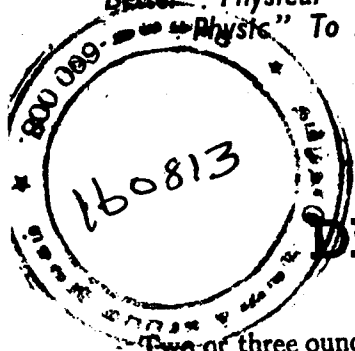
It is the duty of a public education authority not merely to apply the principles of the science and art of medicine to healing through medical inspection and correction of defects, but to direct and indirect prevention of disease, and to the constructive conservation of the natural defences of the child's 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.

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

Better "Physical" Training than
"Physic" To Make You Better.



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.

Published by The Health Propaganda Board, Egmore, Madras.

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

You Know that

"HEALTH IS WEALTH"

but

"HOW TO ACHIEVE IS A PROBLEM"

Here is your guide—

AROGYA MARGAM

A MONTHLY HEALTH JOURNAL DEVOTED
TO HEALTH AND HAPPINESS.

Write for complimentary copy to

The Secretary,

HEALTH PROPAGANDA BOARD

PANTHEON ROAD

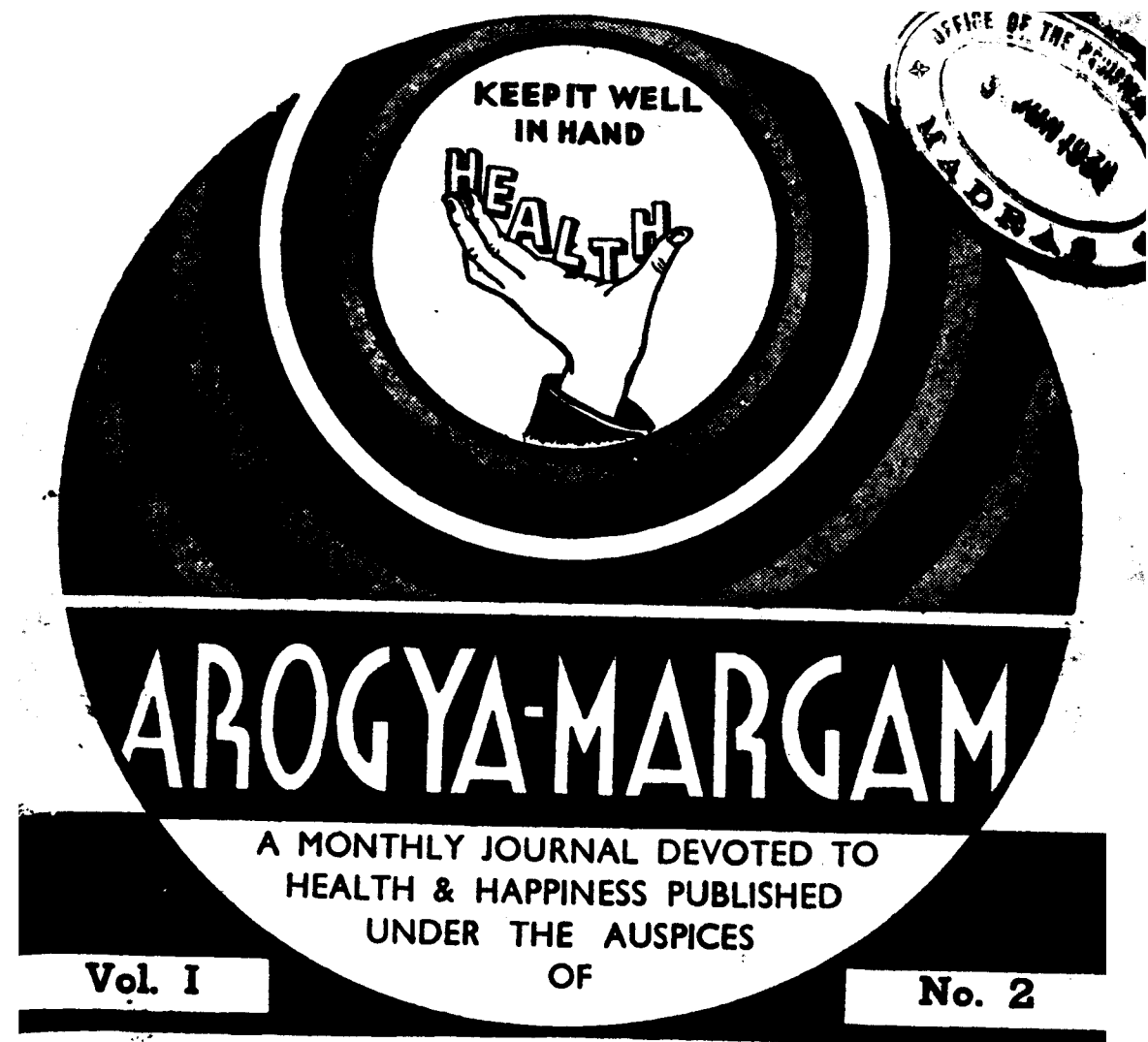
EGMORE, MADRAS

AROGYA MARGAM

OR

THE HEALTH GUIDE

OF THE MASSES



THE HEALTH PROPAGANDA BOARD, MADRAS

• MAY •
1938

SUBSCRIPTION
s. 1/4 per annum

"PANTHEON GARDENS"
PANTHEON ROAD
EGMORE :: MADRAS

Annas Two
per copy

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 Patten Road, Mount Road, Madras

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

CONTENTS

	Page		Page
1. Avoidable Mal-nutrition (Editorial) ...	37	11. Noise and Public Health Its Control	52
2. Nutrition Value of Bananas.	39	12. How much Liquor Makes a man Drunk ...	54
3. Nutritive Value of Different Types of Milk ...	40	13. Drink and Driving ...	57
4. Breast Feeding ...	43	14. The Common Cold ...	59
5. Health Hints ...	44	15. Your Hands and Disease...	61
6. What is Health Education..	45	16. Hints from the Health Departments ...	62
7. Place of India on the Health Map of the World...	46	17. Sound Advice of a Doctor to Men Over Forty	64
8. Physical Education in our Country ...	47	18. Hygiene during Pregnancy.	66
9. The Excess or the Defect in My Weight ...	49	19. Are you chained to the Coffee Pot? ...	69
10. Sports in Social Life ...	50	20. How to deal with Fainting and Collapse ...	71

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.

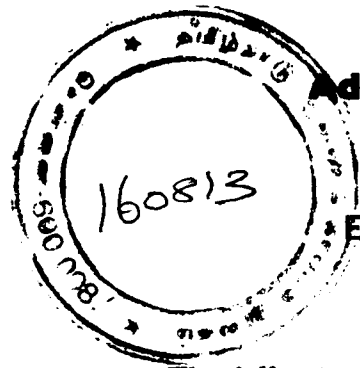
The Managing Editor reserves the right to alter, delete, or make necessary changes in the matter sent for publication. No reasons will be given for rejecting articles.

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.



Advertisement Department

PANTHEON ROAD,
EGMORE, MADRAS.

The following are the rates of advertisement in the Journal

"Arogya Margam"

Size: ROYAL OCTAVO

	Full page.	Half page.	Quarter page.	One-eighth page.
Per Insertion	Rs. 25/-	Rs. 15/-	Rs. 8/-	Rs. 5/-

30% extra back cover page ; 20% extra on inside cover pages ;

Coloured Display of Advertisement extra.

Rebates of 2½%, 5% and 10% for 3, 6 & 12 insertions respectively.

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.

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.

A

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, in spite 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 Coonoor 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-1, 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"
—o—

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.

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."

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 ... 22
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.

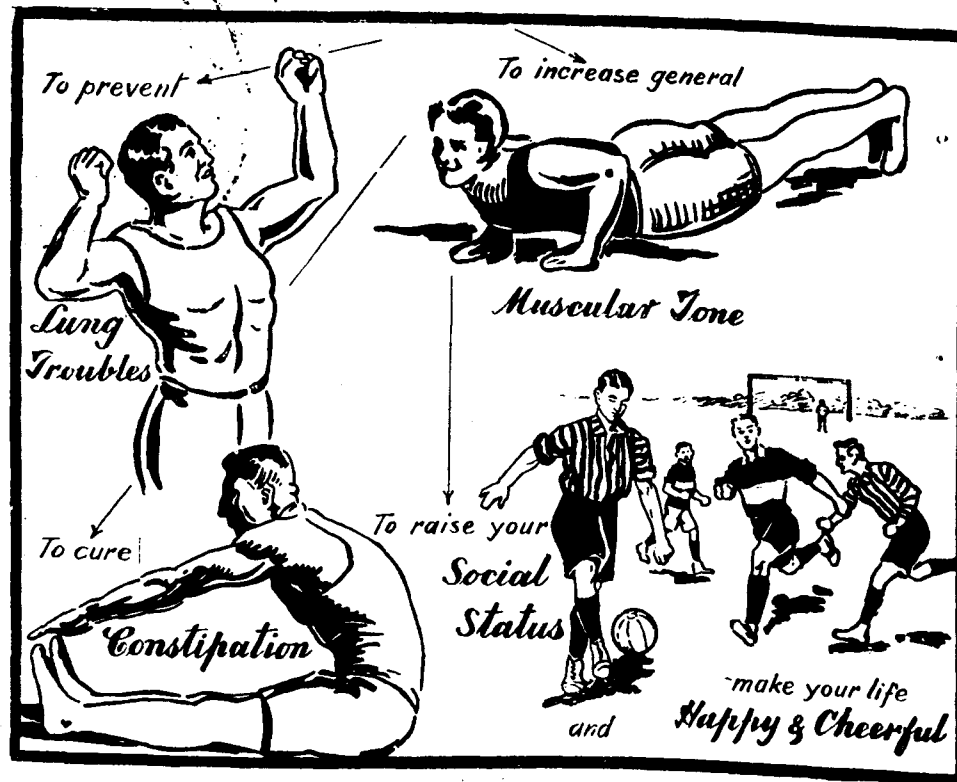
To increase weight, the meals should be taken very slowly, followed by a rest, and should not be accompanied by reading or other mental stimulus. Every effort should be made to obtain physical and nervous relaxation. Meals should contain all the food essentials (proteins, fats, carbohydrates, vitamins,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

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

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 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.

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

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.

Yours faithfully,

Address (in block letters.)

Signature.

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 prophylax is 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?

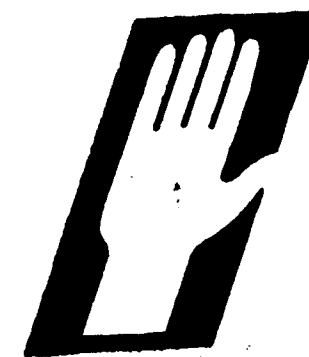
By the Misuse of Hands.

So

Clean

Hands

Please



Clean Hands said to Dirty Hands:
"Are't 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 tired. 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 of 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 wherein 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

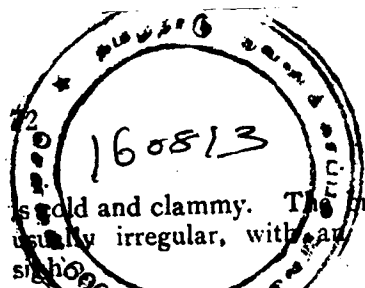
WITH

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



2:5 to 2:11, 1938

AROGYA MARGAM

138-1-1-2

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 sinelling 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

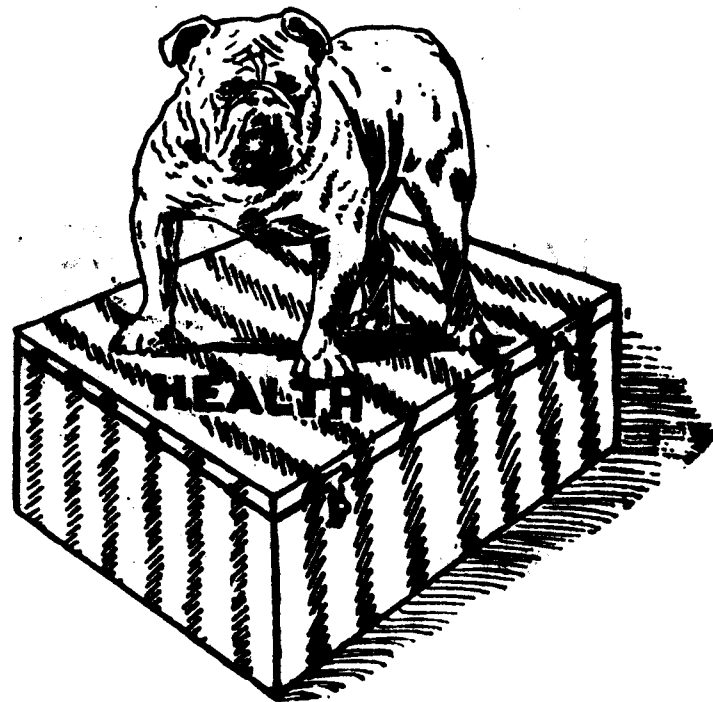
FOR PEOPLE OF

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 Rau 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