

TEACHING HEALTH—WAYS AND MEANS

ONE out of every four American boys drafted for the World War was physically unfit for service. There are 15,000,000 children in our country with some physical handicap. Six million of these are suffering from malnutrition. In the light of modern science, we know that these are conditions which should not exist among us. A nation composed of healthy people means a nation of better people, morally and mentally. Therefore at the present time one of the greatest services a person can perform for his country is to be healthy, for the sake of those around him as well as for his own sake. So we have come to realize that health must be taught in the schools.

What, then, are the aims and guiding principles of this new education in health?

First, we want to form habits, not merely impart information. For a good many years both physiology and hygiene have been taught in the schools. We have taught children the number of bones in the body and the circulation of the blood as well as the dangers of the house-fly and the way malaria spreads. In other words, we have given the student certain information regarding his body and the conditions best suited to its growth. The present aim in teaching health is not only the giving of knowledge, but the stimulation of action. We want to create good health habits. Dr. Emmett Holt says, "For this end, only such knowledge of the functions and the needs of the body is required as to make the child understand what is necessary for its protection and care, or enough to form the basis of good health habits."

The habits which would contribute to good health are enumerable. For this reason it has seemed wise to organize our teaching around eight simple rules. Each rule aims to establish a habit. These are:

1. A full bath more than once a week.
2. Brush the teeth at least once a day.
3. Drink at least a pint of milk every day.
4. Sleep long hours with the windows open.
5. Eat some vegetables and fruit every day.

6. Drink at least four glasses of water every day.

7. Play a part of every day out of doors.

8. A bowel movement every day.

These rules, which are the rules of the health game, should receive emphasis in every grade. But there should also be other habits added, appropriate to the child's physiological development for every school year.

There are certain fundamental principles which are the basis of all habit formation and which can well be applied to the forming of health habits. These are:

1. The practice of the habit must bring satisfaction. This satisfaction may be merely the approval of the teacher or it may be an actual gain in weight.

2. In order not to become distasteful, we must avoid monotonous repetition. The child is not going to cultivate the habit of drinking milk simply because he continually hears that milk is good for him. To prevent monotony, therefore, we must:

3. Approach the subject from different angles. First, tell the children a story about the good fairy who helped the little boy win the race, and who helped the little girl be as beautiful as she herself was, by teaching them to drink milk. Then they can sing a song about drinking milk. Later let them paste in the scrap-books pretty pictures illustrating the value of drinking milk. Finally, the child has a number of pleasant responses toward milk.

We need to approach the subject from different angles, also, because each child has a different background on which to build. The child who has been in the habit of being "sewed up" for the winter will have a different attitude toward cleanliness from the child who lives in the house with several tiled bath-rooms.

4. A habit cannot be established by confining its practice to one short class period. Health teaching should be distributed through the entire school day by correlating it with the other school subjects. The ingenious teacher will find some way of connecting health with almost every subject in the curriculum.

5. It has been said that "the crucial point in all habit formation is the possibility of

lapse in the practice of the habit before it becomes mechanical. Every time we slide back into the old habit, the new one is retarded or even prevented." To prevent such lapses, teaching the health habits must be followed by some kind of daily inspection. The most suitable time for this is in the morning before the lessons have started. There are many ways of doing this. One of the following is suggested:

a. A rapid review of the pupils by the teacher.

b. The formation of a Health Club in which children may elect officers who inspect.

c. Probably the best method of checking up is by letting each child keep his own record. This may be done in a scrap-book made of drawing paper. Down the left-hand edge of the paper, write the habit you want to form. Across the top of the page, write the days. Each morning have the child put a mark by those habits which he has kept. At the end of the week, give a gold star to every child who has kept all the rules of the game.

The second important principle in teaching health is that we must make our teaching positive, not negative. We cannot expect to build habits or cultivate a wholesome attitude toward health by telling children what *not* to do. For several years we have told children *not* to put pencils in their mouths, and *not* to turn the pages of their books by wetting their fingers in the mouth without having apparently improved the health of the State. We want to adopt a new constructive policy. "We want them to think of health in terms of happiness and beauty and joy rather than weakness and disease."¹

We cannot make children realize the importance of health without first realizing it ourselves. J. Mace Andress says, "The American people do not yet seriously appreciate the fundamental importance of health for happy and successful living."² This is the third principle in teaching health, that the teacher not only realize the value of health, but that

she must be enthusiastic about the attainment of health. There is no greater influence among students than enthusiasm.

The fourth principle is that before a child can be influenced, he must be interested. We must create within the child a desire to be healthy. Few children have any desire of health for health's sake. "But every girl wants to be beautiful and every boy wants to be strong and athletic. The wise teacher will build on these instincts" to make the child feel that the acquisition of health is something interesting and attractive, something necessary to his own happiness and a patriotic duty which he owes to his nation. He should be taught that health has an economic value. We have all heard many times the story of the man who spent his health to get his wealth, and then spent his wealth to get his health.

How can these principles which have been enumerated be practically applied in Health Education?

To make a child healthy through creating the right habits, we must examine the child to find out what his physical condition is in order that we may know what habits he most needs to cultivate.

If an architect were going to remodel an old house, his first move would be to examine it, to see exactly what sort of structure he was to build on. The same thing is true in remodeling the body of an unhealthy child. We want to find out what kind of timber there is in the structure and how much reinforcing it needs, first by weighing and measuring the child. Health becomes something real to a child when he sees some relationship between his weight and the weight of a normal child his age and height. It establishes a goal toward which he may strive.

Normal weight charts for boys and girls have been worked out by Dr. Thomas D. Wood as a result of statistics collected from a great many sources. Weight bears a relationship to age and height. These normal weight charts are published by the Department of Interior, Bureau of Education, at a cost of five cents.

A child's weight is of more importance than being merely a way of interesting the child in his health. It is an index of the general condition of the child's health. Our

¹Health Education No. 4, Department of Interior, Bureau of Education, Washington, D. C.

²The Teaching of Hygiene in the Grades, by J. Mace Andress. Houghton Mifflin Company.

teaching will depend upon whether a child weighs what he should. In this case we want to encourage him to do those things which will keep him physically fit. There will be a few children who are over weight to the extent that they should see the necessity for reducing.

The children whom we will find in the greatest numbers, and with whom we are most concerned, are those underweight. Every child who is more than ten per cent. underweight is considered malnourished. Malnutrition is the disease most commonly found among children of school age. In most cases it is something which is preventable and curable. Malnourished children "are pale and anemic, inattentive and listless in their studies, are disinclined to run and play. They are easily fatigued mentally and physically and are often retarded in their school work. The malnourished child is particularly susceptible to disease. He is always catching whatever disease happens to be making the rounds."

Weighing children means that you must have scales, equipped with an apparatus for measuring the height. Scales of this kind may be bought from Fairbanks Scales Company, Baltimore, at a cost of \$48 with a 40% reduction for schools, or from Powers & Anderson, Richmond, priced \$40 with a 10% discount. Try to secure these scales through your local school board. If they are financially unable, or do not see the wisdom of spending money in this way, enlist the cooperation of the Parent-Teachers' Association or some private organization.

As a last resort, borrow scales. But only do this rather than not weigh your children at all. There may be some public-spirited grocer or butcher who would send his scales to your school. If this is inconvenient, take the children to the scales. But *weigh them*.

Since a child's weight is determined by his age and height, his height must be carefully ascertained. This may be done by means of a tape-line tacked to the wall. The height should be taken in the stocking feet.

Children should be weighed monthly. Their gain or loss (whichever is their aim) acts as a motive for practicing health habits. Have the children remove their shoes before weighing. Often a boy's heavy boots will add several pounds to his weight. But be sure and warn them, the day before, that they

are to be weighed and that they will have to remove their shoes. This may save some embarrassment over holes in the stockings. No deduction need be made for clothing, except in a few extreme cases, when in the judgment of the teacher it seems wise to do this.

Weighing day should be made a joyous occasion. Ask all the children who have reached their normal weight to stand. This becomes with them an honor very much to be sought after. Let each tell what he thinks he has done which has helped him gain. If there is a child who has been particularly anxious to gain and has at last done this, let the children sing for him:

"A boy came to our class one day
And found that he was losing
But there we taught him how to gain
By proper foods and choosing.

Johnnie Jones, keep it up,
Johnnie, you're a dandy,
Don't forget the milk and fruit,
But leave alone the candy.

Ask the children who have gained to raise their hands. The amount each has gained is to be emphasized, never the amount below normal weight. Care should be taken not to call attention to the child who has not gained. We should use every precaution to keep him from becoming sensitive and discouraged about his underweight.

One way of making a child's weight very real to him, and a plan which all children enjoy, is to keep a record of the weights. It becomes like keeping the score to a game. In the lower grades, let him have a sheet in his tablet where he writes his weight each time. In the upper grades the children can make graphs of their normal weight line and their actual weight line. Each time interesting comparisons between the two may be made.

The teacher should keep a record of her class's weight on a class-room weight chart. These are supplied by the Department of Interior at a cost of 5 cents. On the chart are columns for the child's name, age, height, normal weight and a column for each month's weight.

A monthly record of the child's weight should be sent home either on the monthly report card or on a card especially for this purpose. This stimulates the interest of parents who are otherwise indifferent.

After a child has been weighed and measured we should find out even more about his

condition through a physical examination made by a physician. Whenever possible one of the child's parents should be present at this examination. It should be conducted in the nature of a conference between the parent, teacher and school physician. In this way many suggestions and bits of advice which might otherwise be misunderstood or resented may be given to the child's parent. This examination should be made annually.

If the architect found any partitions or walls which would interfere with his new plans for the house, it would first be necessary to have these removed. If we find from the physical examination that the child has some physical defect which is retarding his growth and development either the child's parent should be encouraged to have this remedied, or with the parent's consent, the child should be taken to the nearest clinic.

Then the architect starts the actual construction on his new house. The masons and carpenters begin their work. We must supply the child with the means of reconstructing his body. This means is food. It has been found that that there is no one thing as instrumental in improving the child both physically and in the type of work done in the class room as the school-lunch. The child's weight record may be used to create an interest in the school lunch. The lunches may be prepared by the teacher or by volunteers among the older girls. In one Virginia city, for several years the hot lunch was prepared by volunteer help from the children's parents and other public-spirited women.

HEALTH TEACHING IN THE PRIMARY GRADES

Little children have no real interest in health. Our teaching in the primary grades, therefore, must be done almost entirely through correlation with the regular school subjects. We must appeal to him through his love of the fanciful, and his desire for action.

Many fairy stories have been written for teaching the eight rules of the game. The stories may be made a part of the regular language lesson. After being told by the teacher, they may be dramatized by the children, thus giving an opportunity for self-expression, so important in dealing with children of this age.

Another way of teaching health facts in the language lesson is by having the children work out original rhymes. Mother Goose

furnishes the inspiration for many of these. One first-grader wrote:

"Peter, Peter, orange-eater,
Every day your smile grows sweeter."

These rhymes were written by children in the third grade who were learning to eat the proper foods:³

If we eat Billy Beet,
He will taste nice and sweet.

Peter Parsnip, you and I
Will be friends by and by.

Danny Prune, when on a spoon,
Looks ugly, brown, and fat,
But when we taste we then make haste,
To eat him, just like that!

Charlie Carrot likes to eat
Iron from the ground,
If we eat him we shall be
Big and strong and round.

We are told that with younger children we should foster the play spirit. The many health games which have been written furnish ample opportunity for this. In many instances the games are merely new editions of the games we have played all our lives. One of these is "The Farmer in the Dell."⁴ This has been revised to teach the selection of foods. "The Boy in the Dell." First he chooses milk so fresh, then oatmeal fine, and oranges sweet. Innumerable verses may be added, such as "The boy takes spinach green, the boy takes golden eggs." The conclusion says:

"All these make muscle strong,
All these make muscle strong!
Heigho, the cherry oh!
All these make muscle strong!"

Another game is "Spinning the Plate."⁴ Name each child some food which children should eat. Then the leader spins the plate and calls out "Carrots". The child named "Carrots" must catch the plate before it stops spinning. If he succeeds, he scores a point, and is the next one to spin the plate. He calls for whatever food he wants.

The health habits have furnished the material for many attractive songs. Some of these are sung to the tunes already familiar to the children. After having played a game

³Health Education No. 10, Department of Interior, Bureau of Education, Washington.

⁴Games, Rhymes and Songs, Southern Division American Red Cross, 249 Ivy Street, Atlanta, Ga.

teaching the selection of foods, suppose we wanted to further impress upon the child the importance of good foods. Teach them to sing the "Health Fairies":⁴

The Health Fairies said to the children
at play,
Come, let's have a party gay,
Invite our friends we love the best,
Invite them here in their Sunday's best

The Carrots came so merrily,
Bringing milk as the company.
The Spinach green brought the Beets
of red,
'Twas a very pretty couple, so the
children said.

Bread and Butter danced for life,
The Orange waltzed with the Apple's
wife,
The awkward Potato and the Fat Little
Egg
Nearly tripped over the Turnip's leg.

They danced all day till the sun was
low,
Till the Fairies all prepared to go
To see that the children were all well
fed,
And then to tuck them into bed.

The ways of illustrating health ideas through hand-work are many and varied. Children can make scrap-books, booklets or posters illustrated by free-hand paper cutting or from pictures cut from a magazine. As each new rule is learned, it may be illustrated. The children who have learned to write well want to write something under the pictures. Let them decide what this shall be.

HEALTH TEACHING IN GRADES IV-VI

The effort to form good health habits should not be relaxed in the middle grades. It is important that the teachers of health in these grades make themselves familiar with what has been done in the primary grades. The work should be continued along the same line, but necessarily approached from different angles.

The Fairy Story has lost its charm for the child eleven or twelve years old. At this age he becomes interested in stories about real children. He enjoys hearing how, although Theodore Roosevelt was a very delicate child, through his own efforts he developed into a vigorous, robust man. Such stories in the fourth or fifth grade may be followed in the sixth grade by the lives of men like Pasteur, Walter Reed, or Gorgas, and the story of some

of the dramatic achievements in modern preventive medicine and sanitation.

As a child grows older, the reason for health rules becomes more important to him. At this age, habits which have been formed or which are still in the forming, should be reinforced by accurate scientific knowledge. This material should be carefully selected by the teacher, with a view to throwing light on some vital health problem.

In these grades we may still appeal to the child's love of dramatization. With the careful guidance of a clever teacher, very attractive playlets may be written by the children. Or the children may dramatize some which have already been written.

There are many ways in which health may be correlated with the other subjects of the curriculum. Some of these ways are:

1. Language.

a. Compositions may be written or oral reports may be given on such subjects as, "How I Gained" or "Why I Lost". "A Trip to the Market" furnished the material for the following report which was written in the fourth grade:

*A Trip to Market*⁵

(Child's work before there was any revision of English.)

S——'s market is on Summer Street near the South Station. Everything is nice and clean there. The meat is kept in a refrigerator room. When anybody comes in to buy meat the man will go into the cold room and cut it. The other meat that is out in the store is kept covered in showcases. The vegetables and fruits are always fresh. They are kept covered with nets.

b. In the middle grades health may also be connected with language by letting the children make simple rhymes. One fourth grader wrote:

*Drink Milk*⁵

Bobbie drinks his milk each day,
Teddie doesn't, so they say,
Bobbie's growing big and tall
Teddie doesn't grow at all.

Shirley Somes.

⁵Health Education No. 10, Department of Interior, Bureau of Education, Washington, D. C.

2. Arithmetic.

Such problems may be used as the working out of the comparative cost of different kinds of foods and their relative food value. In problems like the following the child can see the relationship between the cost of food and the importance of its careful handling.

If you buy clean milk from a clean dairy at 17 cents a quart, and unsafe milk from a dirty dairy costs 15 cents a quart, how much do you pay a year for the sake of having safe milk? Is this form of health insurance worth while? Why?

If John earns \$25 a week, and he gets typhoid fever through dirty milk and has to give up his job for ten weeks, how much does he lose in salary alone on account of unsafe milk?⁶

3. Handwork.

a. Individual graphs of the weight may be kept.

b. Scrap-books.

These may contain either original drawings or illustrations from advertisements. The choice and arrangement of these may be made an art problem.

HEALTH IN THE UPPER GRADES

Grades VII, VIII, and the Last Year of Junior High School

One authority has stated that "the newer health movement, which has gained impetus in the grades and which has inspired originality on the part of both teachers and pupils, has made less progress in the upper grades. Here in the majority of cases the work seems to be going along the ordinary formal channels of recitation from text books."⁷

When the child reaches the seventh grade, he is at the age when the group interest begins to develop. This tendency, when properly directed, may be used in the formation of teams, such as football, baseball or basketball instead of allowing it to take the form of school gangs which may often become the terror of a neighborhood.

Both boys and girls should be reminded of the importance placed upon taking care of the body by members of college teams. By being

⁶Health Education No. 6, Department of Interior, Bureau of Education, Washington, D. C.

⁷Teaching Health in the Grades, by J. Mace Andress. Houghton Mifflin Company.

members of a team, some boys realize for the first time the value of personal health.

If it is impossible to have a real athletic team, the pupils in the class may be divided into two groups. These may be called teams and may race for the greatest increase in weight and the lowest number of absences because of illness.

While the boy is most interested in physical strength, the girl's interest is in her personal appearance. She should be taught the beauty and attractiveness of good health. Probably the hardest thing, and yet the thing we should strive to teach a girl at this age is the importance of the proper kind of clothing and shoes. She should realize that these things can make or mar her in health as well as in fashion.

The group interest of children at this age offers an opportunity for training in community life. For this reason in the upper grades health may be more closely related to civics than to any other subject. The class may visit places where food is prepared or sold—cold storage, meat market, creamery or grocery store—with the idea of seeing whether these places are conducted in accordance with the State or City law as designed to protect the health of the public.

When children leave the grades they should be as well trained in the fundamentals of good health as they are in the Three R's.

The worth of any educational process is measured by its products. The worth of our health teaching is measured by the actual health of the children.

J. Mace Andress enumerates the following conditions under which a child should leave the grades:

All children well nourished, none more than 10 per cent below the required standard of weight according to height and age.

Habits of personal cleanliness established.

Bodily resistance.

Freedom from physical defects secured.

Good sitting, standing, and walking posture maintained.

All teeth kept clean.

Permanent teeth all present and in good condition.

Daily recreation in the open air.

Habit of daily evacuation of the bowels.

Practical health knowledge that works.

A sense of buoyant physical well-being.

Partnership in the solution of school, home, and community problems in health.

SOME OF THE MATERIAL THAT MAY BE USED
IN TEACHING HEALTH

Stories

1. (a) Cho-Cho and the Health Fairy. (b) Rosy Cheeks and Strong Heart. Child Health Organization, Penn Terminal Building, 370 Seventh Avenue, New York City.
2. Keep-Well Stories for Little Folks by Mary F. Jones. Lippincott, Philadelphia.
3. Jock O'Health and Peg O'Joy by B. S. Herben.
4. (a) Teaching Health Through Stories, Games and Outlines. (b) Silent Reading in Health. Iowa Tuberculosis Association, 518 Century Building, Des Moines, Iowa.
5. Gentle Perfect Knight. National Tuberculosis Association, 370 Seventh Avenue, New York City.

Songs and Games

1. Mother Goose. Metropolitan Life Ins. Co., 1 Madison Ave, New York.
2. All Thru the Day the Mother Goose Way by Jean Broadhurst. Lippincott.
3. The Minstrel. New Jersey Tuberculosis Association, Newark, N. J.
4. Child Health Alphabet. Metropolitan Life Ins. Co., 1 Madison Ave., New York.
This may also be bought from the Child Health Organization in the form of a card game played like authors.
5. Health First Reader and Public Health Rhymes. Steobridge Lithographing Co., Cincinnati, O.
6. Rhymes of the Health Crusaders. Oklahoma Tuberculosis Association, Oklahoma City.
7. Games, Rhymes and Songs. Southern Division American Red Cross, 249 Ivy Street, Atlanta, Ga.
8. Rhymes of Cho-Cho's Grandmother. Child Health Organization, Penn Terminal Building, 370 Seventh Ave., New York City.

Plays and Pageants

1. Meadow Mountain. Iowa Tuberculosis Association, 518 Century Building, Des Moines.
2. The Milk Fairies. Mrs. Jennie McCrilles, 51 Cornhill, Boston, Mass.

3. Five Playlets. Hester W. Jenkins, Bureau of Charities, 69 Schermerhorn Street Brooklyn, N. Y.

4. From the Child Health Organization, Penn Terminal Building, 370 Seventh Ave., New York City. (1) Health Plays for Children. (2) Four Plays: The House the Children Built, The Wonderful Window, The Magic Oat Field, The Little Vegetable Men.

Teaching Health

Health Education Bulletins Nos. 1-11, Department of Interior, Bureau of Education, Washington, D. C.

Manual for Teachers, Superintendents and Health Workers. National Tuberculosis Association, 370 Seventh Ave., New York City.

PENELOPE MORGAN

THE PERMANENCE OF THE ENGLISH
LANGUAGE

The English language, curiously moulded out of primitive German dialects and the speech of the Norman conquerors, has always been a mongrel, losing inflections and niceties with easy vulgarity and borrowing here and there with careless impropriety. Yet it has suited itself to the needs of a great population and a great commerce and to the creation of a transcendent world of enduring grandeur, and today it is beginning new services and new creations in all continents. It is the speech of the Bible and of Shakespeare and of the newspaper and of the jargon which now pollutes and then enriches it. If anything in this mortal world now promises permanence it is this language.—Ashley H. Thorndike.

The Federal government should extend aid to the states for the promotion of physical education, the Americanization of the foreign-born, the eradication of illiteracy, the better training of teachers, and for promoting free educational opportunities for all the children of all the people.—President Warren G. Harding.

I view education as the most important subject which we as a people can be engaged in.—Abraham Lincoln.