

II.

HEALTH EDUCATION PROJECT IN THREE SCHOOLS

Multnomah County, Oregon

Cecil L. Schreyer

Preface

In planning a health program for either high school or grade school, the first consideration must be the object to be accomplished.

(1)
In her book on school nursing, Mary Ella Chayer says the primary aim of such a program is "For every child continuous and satisfactory growth in control of conduct contributory to health." To further this aim it is essential that methods of contributing to the continuous and satisfactory growth must be such as will gain not only the interest, but also the active participation of the child to the point where he will almost unconsciously adopt such personal habits in healthy living as will accomplish this aim.

In considering the content of the school health program, Miss Chayer says, "School nursing has changed intrinsically within the past ten years. The whole field of public health has advanced, resulting in a more enlightened public. Two types of school nursing seem to be emerging, the health service which deals largely with the control of contagion and the correction of defects, and the health education type which aims at the fullest development of the personality,

(1) School Nursing, a Contribution to Health Education -
G. P. Putnam's Sons

through supervision of the emotional and social aspect as well as the physical. In the latter type, health service is solely a means to the end of health education."

In the health service type of school nursing, the physician and the public health nurse are the means of bringing to the school such activities as will control contagious disease through inspection and examination of suspects, exclusion and vaccination or inoculation for immunity, physical examination to detect existing physical defects, and home visits for the purpose of explaining to parents the necessity of correction.

The teacher plays a more or less passive role in this program, reporting to the nurse those children, who, for some reason, are not presenting a normal picture in their school activities and learning progress. The nurse, who in most instances has no training or experience in the teaching art, is expected to care for the service in which she is skilled and, in addition, to talk to the children on health topics which are designed to improve their health habits.

To no one is her inadequacy for this work more evident than to the nurse, herself. We must give her credit for doing to the best of her ability something for which

her education has not fitted her, and for hailing with enthusiasm and relief the gradual growth, in the ranks of the teaching profession, of the idea that they have a direct responsibility for the health as well as the academic teaching of their pupils. .

Having occupied the position of one who is attempting to carry on a piece of work for which she is entirely unfitted, the nurse should, and in most cases does, I believe, have a sympathetic understanding of the difficulties of the teacher who is attempting to relate to the teaching of those subjects she knows, this new, and to her somewhat mysterious, subject of health. However, it should not be forgotten by either the nurse or teacher that the basic education of the nurse has not been in health either, but in disease and the care of the ill to bring them back to health. That practically all nurses who have adopted the public health field have embraced so enthusiastically the altruistic aim of keeping people well, and have cheerfully "rendered unto Caesar those things that are Caesar's," namely, health to the curriculum and teaching it to the teacher, speaks a good word for her willing spirit of co-operation.

.....

.....

.....

The Problem

The health service offered to the schools by the Multnomah County Public Health Association, in the fall of 1931, was a health examination for any child in every school in the county, outside of Portland district, whose parents would accept this service. All of the schools accepted the offer and, with many hours of service donated by local and Portland physicians, 3,429 of the 4,000 school children were given thorough physical examinations.

In sending home consent slips for the parents' signatures, an invitation was extended to be present at the examination of their children. Thus an opportunity was given many parents to consult with physician and nurse regarding the physical condition of their children and their need for medical attention, home regime and health habits. Many home calls were also made. However, very few parents came to observe the examinations.

At the end of the school year, when the Association evaluated the work accomplished it seemed that the problem of health must be attacked from another direction. It was recognized that correction of physical defects will put the child in condition to get the greatest benefit from a correct health regime, also that he and his family must

learn to appreciate the fact that "Health is a way of living" and that the home shares with the school the responsibility of providing the means by which the child may have "continuous and satisfactory growth in control of conduct contributing to health."

The Plan

In the summer of 1932, the County Public Health Association authorized its executive director to seek the assistance of the director of health education of the Oregon Tuberculosis Association in outlining a program of School Health Education.⁽¹⁾ Upon the opening of school, a program was ready for presentation which included correlation of health with the service in the schools and with parent study clubs to link the home with the school in building health habits.

Official approval was sought from the County School Superintendent and the School Supervisor. These officers were most cooperative and the superintendent suggested two schools - a high school and a grade school - whose principals were doing excellent work and who would, he believed, welcome the opportunity to take part in such a program.

(1) Appendix I

The plan was presented to these two principals and they asked the representatives of the Tuberculosis Association and the Public Health Association to meet with the respective staffs of teachers who, with one exception, promised their hearty cooperation and participation.

The following pages record the carrying out of the plan, some results accomplished and the goals in view for next year.

In the Grade School

This is a rural school situated on the lower Columbia highway, with an enrollment of about sixty pupils who come from homes scattered through the surrounding countryside. Some come from a nearby saw-mill settlement and others from small ranches among the hills. The school maintains a bus that collects and delivers the children from and to their homes. These homes are of all types, from the comfortably well-to-do with cultured parents to the financially impoverished home, ignorant parents and unclean environment.

There is a parent teacher organization, but, as is often the case, the parents who most need the help, enlightenment and encouragement such an organization can

give, do not attend. The wife of the president of the parent teacher association is a member of the nurse committee of the public health association and, through her interest, the plan was discussed with her organization and a parent study club was formed.

The first step was to secure a list of the doubtful parents and, upon the suggestion of the principal, to visit six or eight of the homes and give a personal invitation to the parents to attend the organization meeting. It was very gratifying, the night of this meeting, to see five or six of these parents present and to find that when the roster of the study club was made, a good proportion of the doubtful ones were listed among the ten who joined. The group agreed to meet once a month at the school-house and carried out this plan fairly well from September to April, except when the weather depleted the attendance.

There are eight grades in this school, divided into three rooms, with a principal who teaches the seventh and eighth grades and an intermediate and a primary teacher.

The teachers were asked to plan health teaching units or projects as an integral part of the school

program correlating the health topic with other subjects whenever the opportunity presented.⁽¹⁾ With the exception of the primary teacher, they apparently had little knowledge of health projects and how to correlate health with other subjects. The plan was put into effect about the third week of September, and for several weeks suggested weekly outlines were sent to the principal.⁽²⁾ Although the plans were not used in entirety, some of the subjects were taught.

It was intended to have a definite tie-up between the teaching of health and the medical service,⁽³⁾ and some desired teaching actually did precede the physical examinations of November seventh. However, there was not as much correlation between the medical and nursing service and the health teaching as had been anticipated, probably due to a misconception of the division of responsibility. In the light of this year's experience, this difficulty can be either prevented or minimized.

The primary teacher was not asked to use the suggested plans, as she had already outlined a series of projects with which she planned to correlate health as incidental teaching. The list of submitted projects follows:

- (1) Appendix II
- (2) Appendix III, IV, V
- (3) Appendix IV

Six Weeks' Period Projects -

September - October	Indian Life
November - December	Pioneer Life (Pilgrims, etc.)
January - February	Eskimo Life
March - April	Holland
April - May	Farm Life or Japanese

Suggested Projects to Fill In -

Children of Many Lands
Swiss Project
African (spring or early summer)
Transportation
Clothing
Community Project
Milk Unit
Food and Garden Project
Seasonal Projects -
Halloween - Safety
Thanksgiving - Food
Christmas
Health manners for all year

(1)
The intermediate grade teacher submitted a list of topics discussed in her classes which look very well in type, but when her class-work was observed, her correlations proved to be very incidental. Her teaching methods were formal and the lessons did not appear to be well planned. This teacher did not use project or unit method.

The principal, who taught the upper grades, also used the formal rather than the unit method of teaching and apparently did very little with health, although he professed keen interest in the plan. The only report he

submitted was that the class was using the "Health Heroes" series.⁽¹⁾ A number of health topics may have been included in the study, as it apparently extended over a long period of time. The primary and intermediate teachers reported from time to time, but no written report was made by the principal.

The material used was supplied by the Oregon Tuberculosis Association⁽²⁾ and obtained from other sources upon request of the teachers.

The Parent Study Group

The object of this group was to link the health teaching with the home. Ten people attended the first meeting and decided to have monthly sessions, a few days following the regular meeting of the parent teacher association.

At the first session, members suggested topics (such as milk, sleep, etc.) which they would like to have discussed and questions they wanted to have answered. Since most of the questions centered about the subject of nutrition, that was the first topic selected. The protective foods, balanced diet, vitamins, methods of including milk

(1) Metropolitan Life Insurance Co.

(2) Appendix VII

and value of vegetables were points brought out by means of lectures, menus, food models, etc., in this discussion.

Other topics considered were rest and activity for children, immunization against contagious disease, prevention of tuberculosis, and the value of periodic physical examination.

Medical Service

The service given by the volunteer physician was a physical examination for every child and personal consultation with each parent present.

The county physician immunized all who wished it against small pox and diphtheria.

The county nurse assisted both of these physicians, made home calls where needed and gave a weekly first aid class to the upper grades. In addition to these activities she made a regular monthly call at the school to check on the health and to inspect and counsel with any of the children who gave evidence of physical difficulties.

Results

School -

- 1 - A stimulated interest in health teaching was evidenced by all the teachers.
- 2 - Although project was not all one could wish, there was more definite planning for health teaching than had before prevailed.
- 3 - The teachers apparently learned more about methods of health teaching, and this would no doubt contribute to the future health curriculum.
- 4 - A better understanding was established between county public health nurses and the school, which will contribute to a better health program in the future.

Study Club -

- 5 - Although attendance was small and some meetings were cancelled because of weather, those who were present derived some very definite benefits;

Information was secured which was fundamental to carrying out health practices in the home.

Some false ideas entertained by some of the parents were corrected.

As in the case of the teachers, members of the group were brought into closer relationship with county and state health authorities, thus helping to lay a good foundation for further health work in that community.

In the High School

The high school approached with a view to placing an integrated health teaching project before the members of the faculty, is situated in a closely-settled community on the northeastern border of Portland.

While this community is outside the city limits, there is easy access to the city by bus and street car by way of Sandy Boulevard. The majority of wage earners commuted into Portland to work before the depression stopped most of the factories and other industrial institutions and cut down the forces of office workers. Many of the residents are office workers and either own or are buying their own homes.

The business section comprises a few stores incidental to such a community, such as a drug store, groceries, a dry goods store, a restaurant, garages, and so forth.

For recreation, there are several golf courses in easy distance, upon which many of the boys act as caddies when time permits, and some have become quite proficient players. There have been places for swimming in nearby small lakes and the Willamette river, but their use is no longer permitted by the land owners.

The girls swim and some of them also play golf, but

not being able to act as caddies, they find this sport less easy of access to them. There is plenty of ground surrounding the grade and high school (in the same block on different streets) which could be available for tennis courts, and the young people are trying to raise money by various means to make it possible to build the courts. There is no movie in the community, but there is one not too far away within the the city limits of Portland.

That these young people are alive to the need for wholesome recreation was shown recently at a meeting of their "Scientific Health Club" in an animated discussion of the possibilities of satisfactory places for summer swimming and the need for tennis courts.

There is a parent teacher association in connection with the two schools which plays an active part in the school life. The president of this organization, recognizing a need for closer relation between the mothers and daughters of the high school group, attempted the organization of a mothers and daughters club in the fall of 1931. This plan met with approval from the girls but indifference on the part of the mothers, until one, who was interested, won the aid of her own daughter. By this means the other girls were enlisted in gaining the cooperation of their own mothers.

At these meetings there was a combination program of refreshments, dancing and a short talk on such topics as social relationships, cosmetics, their proper use and abuse, (personal) hygiene and other subjects related to the individual experiences of girls of high school age. The speakers were women physicians, social workers and others whose training and experience would be helpful in such a program. The talks were short and subordinated to the social phases of the evening.

With this known background, and the knowledge that at least one teacher of the high school faculty was actively interested in health, a plan similar to that carried out in⁽¹⁾ Nassau County, New York, was presented to the principal.

The theme running throughout the project was - "Of the seven cardinal principles of education, at least two are broad enough to enlist the cooperation of all teachers regardless of the departments in which they work. These two are character education and health."⁽²⁾

(1) Appendix VIII

(2) Outline of Health Education Program for High School,
by Frances Elizabeth Baker, Eugene High School.

An opportunity was given for discussion of the program with the members of the faculty. Not all received the suggestion with equal enthusiasm. This was felt to be due more to lack of understanding than disapproval, a theory borne out by later developments. Those present were the principal and the teachers of science, home economics, library and English. The science teacher, who was known to be interested, and who acts as a more or less unofficial dean of girls, was given the responsibility of adapting the suggested plan to the school curriculum and of gaining the participation of the faculty.

A "Faculty Health Committee" was organized, consisting of the following departments - mathematics and general science, library, physical education, English, commercial, home economics and physiology and junior high. This committee met once to discuss plans, but no further meetings were held. Following this meeting the librarian took an inventory of health literature available in the school library. At the suggestion of the health chairman, the book, "Health through Projects," by E. D. Brock, was purchased for the use of the teachers.

Under the leadership of the health chairman, who seemed to have a clear idea of the meaning and purposes of

health teaching, some interesting correlations of health with other subjects were developed. This chairman was instrumental in organizing clubs in three classes. Among these were two with definite health motivation, "The Health Crusaders" and the "Scientific Health Club."

The projects, as finally completed, were as follows:

General Science -

First division (18 pupils)

Health Club (Health Crusaders) meets each Friday.
Health project required for term's outside work.

Second division (33 pupils)

Health Club (Scientific Health Club) meets each Friday during class period.

Reports and discussion on various topics related to health:

Alcohol and tobacco
Vaccines and serums
Graphs and charts of disease and death rates.

Arithmetic

Problems concerning statistical material presented in graphs:

Life insurance.

Death rates from different diseases, as they relate to age groups, etc.

Light and ventilation, as related to individual health.

Percentage requirements of the essential foods.
(carbohydrates, proteins, fats)

Weight charts

Study of mortality tables of insurance companies.

(In all cases the interpretive side of these graphs and tables is stressed by the teacher.)

Home Economics

Clothing - relation to health.

Diet - protective foods, balanced ration - vitamins, vegetables, milk.

Domestic science class planned and cooked their own lunches, based upon above data, and responsibility for correct combination was given to the pupil delegated to purchase the articles of food to be included in the day's menu.

Physiology (home economics teacher)

In addition to formal study of physiology, the members of the class brought in reports on articles, lectures and books related to health.

(There did not appear to be adequate checking upon the scientific accuracy of this material. The pupils gleaned their information wherever it could be found from articles in the daily press to such magazines as Hygeia.)

Library

This teacher inventoried the available health literature and acted as guide and adviser to pupils in search of material, such as

Health Heroes

Hygeia

Physical Education

Intramural sports.

Girls' basket ball

" volley ball

Indoor baseball

Boys - Foot ball

Girls - golf lessons (23 girls)

Commercial

Health and personal hygiene as an asset in seeking work.

Dictation from health material in shorthand and typing classes.

English

Papers in science checked by teacher.
Health edition to school paper, to be edited by
English VI class.

Social Problems

Health and disease were considered and discussed
from this standpoint.

The Parent Study Club

An attempt was made to organize a parent study club,
similar to that in the grade school project, but, due to the
already functioning "Mothers and Daughters" club, this was
unsuccessful. However, a speaker on "Mental Health" was
invited for one meeting, and the chairman of the health com-
mittee spoke on the plan for health teaching in the school.

Medical and Nursing Service

Physical examinations of the girls' basket ball
team were planned by the county public health nurse, in co-
operation with the instructor, and offered to all high
school pupils who wished to avail themselves of the opportunity.

Several physicians gave voluntary service to this
work with most happy results so far as the girls were concerned,
at least, as the woman physician who made these examinations
gave each girl plenty of time not only for the examination

itself, but for consultation as to her condition, needed care and any questions she might wish to ask. Practically every one proved to have some special problem she wished to discuss.

Forty-two per cent of the high school students took advantage of the opportunity for physical examination. The science teacher followed these examinations with personal conferences with each pupil about his health. The nurse held individual conferences wherever it seemed advisable, and home calls were made in several instances.

The county nurse also conducted a home hygiene class with a small group of Junior High girls, but there is a question whether girls of this age are sufficiently matured to profit much from such a class.

Immunization was offered to all high school students, in connection with the grade school clinic, and many accepted.

Results

School

- 1 - A growing interest on the part of the teachers as they learn more of the methods and possibilities of such a program.
- 2 - Awakened consideration of their own health on the part of the pupils, as evidenced by the questions asked of the examining physicians and the nurse.
- 3 - A closer bond between the school and the health associations growing out of realization by the teachers that the health group has something valuable to give and is not attempting to add an extra subject nor to interfere in the teachers' field.
- 4 - An enthusiastic determination by the chairman of the faculty committee to continue another year with a broader program.
- 5 - As a final demonstration of the accomplishments of the year's adventure in integration of health with curriculum subjects, a prominent place in the display of completed projects, in their annual "Open House", was given to health posters and booklets, balanced diets, charts and graphs.

Parent Teacher Association

There were no tangible results, but a series of talks related to the school program will be offered to this group in the hope that at least a part of the series will be arranged.

Nutrition Project in Fairview School

This school is a comparatively new, fairly modern brick building, with four rooms, an auditorium and facilities for personal cleanliness for both teachers and pupils. It has a small kitchen for the serving of hot lunches and employs a cook at least part of the year.

There are ample grounds surrounding the school with play space, some play equipment and a shed for rainy weather recreation. The grounds are sufficiently landscaped to give an attractive appearance.

The community in which the school is located is rather scattered, with a few houses close to the school, a community church, and a store in which is housed the post office.

Of the 125 pupils, the greater majority live on small ranches round about and come to school in the busses maintained by the school board. Many of these children live on truck garden ranches, berry ranches or bulb farms. A goodly percentage are Japanese children. Most of them work on the ranches more or less throughout the year, but especially in the spring, summer and fall.

In the spring of 1932, a community group of the

Multnomah County Public Health Association was organized, and to start it functioning, a series of projects was offered the members. One of this series was a nutrition class under the leadership of the director of health education of the Oregon Tuberculosis Association, who had kindly offered her services for this project. The idea of the nutrition class was accepted and the group arranged for a weekly class of six or eight weeks' duration.

As a direct outcome of this class, the group, with the cooperation of the school authorities, requested the health association to inaugurate a nutrition class comprised of the sixth, seventh and eighth grade children, under the same leadership. The mothers felt the children needed to improve their nutritional habits and, although the fundamental problem was in the home, these mothers who needed the instruction most would not attend a study group. The teachers frankly said they did not know how to teach the subject and asked for a demonstration, in order that they might have a better idea of the methods for including the subject in their classes next year, and this class was arranged.

The two teachers concerned agreed to correlate nutrition with other subjects when opportunity presented itself. It was decided to carry the subject over a period of eight weeks, with the holding of a weekly demonstration class and the teachers

conducting a supervised study period once a week.

Important classes of foods were discussed, reasons for their use determined and methods of use in diet explained. Considerable research into scientific books and magazines was accomplished. Practical experience was given in planning meals by means of food models, and the class was taught how to make simple dishes, such as junket. (1)

Toward the end of the period, the pupils kept a record of their own menus for one week and handed them to the nutrition teacher who spent an extra day in school holding a special conference with each member of the class. After carefully studying their own menus, the children were able to suggest improvement in their own diet and discussed with the nutritionist means of making these improvements.

At the close of the eight-week period, the class held open house for their parents and a few invited guests, gave a playlet on diet and demonstrated the making of junket, which they later served as a sample of their accomplishment.

Projects -

Display of class note-books.
Model meals (food models).
Menus presented to parents and guests. (2)
Making of junket.

(1) Appendix IX

(2) Appendix X

Correlations - 6th grade

Spelling - Learned to spell new words, as vitamin, vegetable, pasteurize, etc.

Geography - Where foods come from. (Special interest was shown in relation to cereals, and their source and use. Many correlations were suggested by the children themselves.)

Arithmetic - Story problems concerning such things as the probable cost of green vegetables and which would be more economical. Simple percentage and discount problems.

Art - Made covers for note books and menus.

Suggestion made by teacher:

That the course should cover twelve weeks, as this would allow more time for practical meal planning.

Results

Teachers -

Most enthusiastic about the work of the class, particularly the sixth grade teacher, who has good ideas about making nutrition a progressive subject in the grades, leading on to food preservation, transportation, etc.

(Unfortunately, neither of the teachers will be teaching next year.)

Pupils -

- 1 - Generally increased interest in diet and health.
- 2 - Mitoshi, Japanese child, was persuaded to drink milk by classmates. All previous efforts by teachers had failed.

- 3 - The parents of a sixth grade girl left the decision of the needed removal of tonsils to her, and, because of her increased interest in health protection, she is having them cared for this summer.
- 4 - A fifth grade girl, who was not in the nutrition class, added milk to her diet because of interest developed through contact with the sixth grade. This girl was underweight and neither teachers nor parents had previously been able to interest her in her diet. The posters used in the class and displayed in the classroom and hall also helped to arouse her interest as well as that of other fifth graders.

Homes and Community

The results in the homes of the individual pupils cannot be calculated. If the carrying out of this project serves to correct the habit in the Japanese homes of superimposing the western cereal food upon their own native rice dishes, it will improve one diet fault. If it aids in increasing the milk consumption of the children, and the use of vegetables in the homes of those who grow them, it will have been a valuable demonstration.

SUMMARY

The methods of procedure were used by the sponsors of the foregoing program in contact with the schools used for this experiment:

- 1 - Presenting definite outlines for teaching projects.
- 2 - Outlining the program and leaving the detail to the health committee.
- 3 - Furnishing a leader who carried on the project

assisted by the teachers in the class intervals.

All of these plans seem partially successful. None of them entirely reached the goal in the minds of those proposing them.

In the high school -

Closer coordination between the committee and the health associations could have resulted in more definite projects. More frequent meetings of the committee, with a representative of the sponsors and the public health nurse sitting in, would have given opportunity for a closer coordination of the medical and nursing service with the health teaching, and an opportunity for guiding the correlations along more definite lines.

A list of the material contained in the school library, an opportunity to add to it a bibliography of source

material for the topics presented before the health clubs by their members, checking on the scientific accuracy of topics discussed in the home economics and physiology class, would all have been determining factors in guiding this experiment in integration of health with the high school curriculum.

In the grade school -

The presentation of definite study plans for several weeks of the fall term in this school did not, as was expected, guide the two upper grade teachers into a wider use of this method.

That the intermediate teacher was by belief opposed to health teaching was no doubt a factor and the adherence to the formal teaching of the earlier generation of teachers, rather than the modern project method, was a very definite obstacle in both cases.

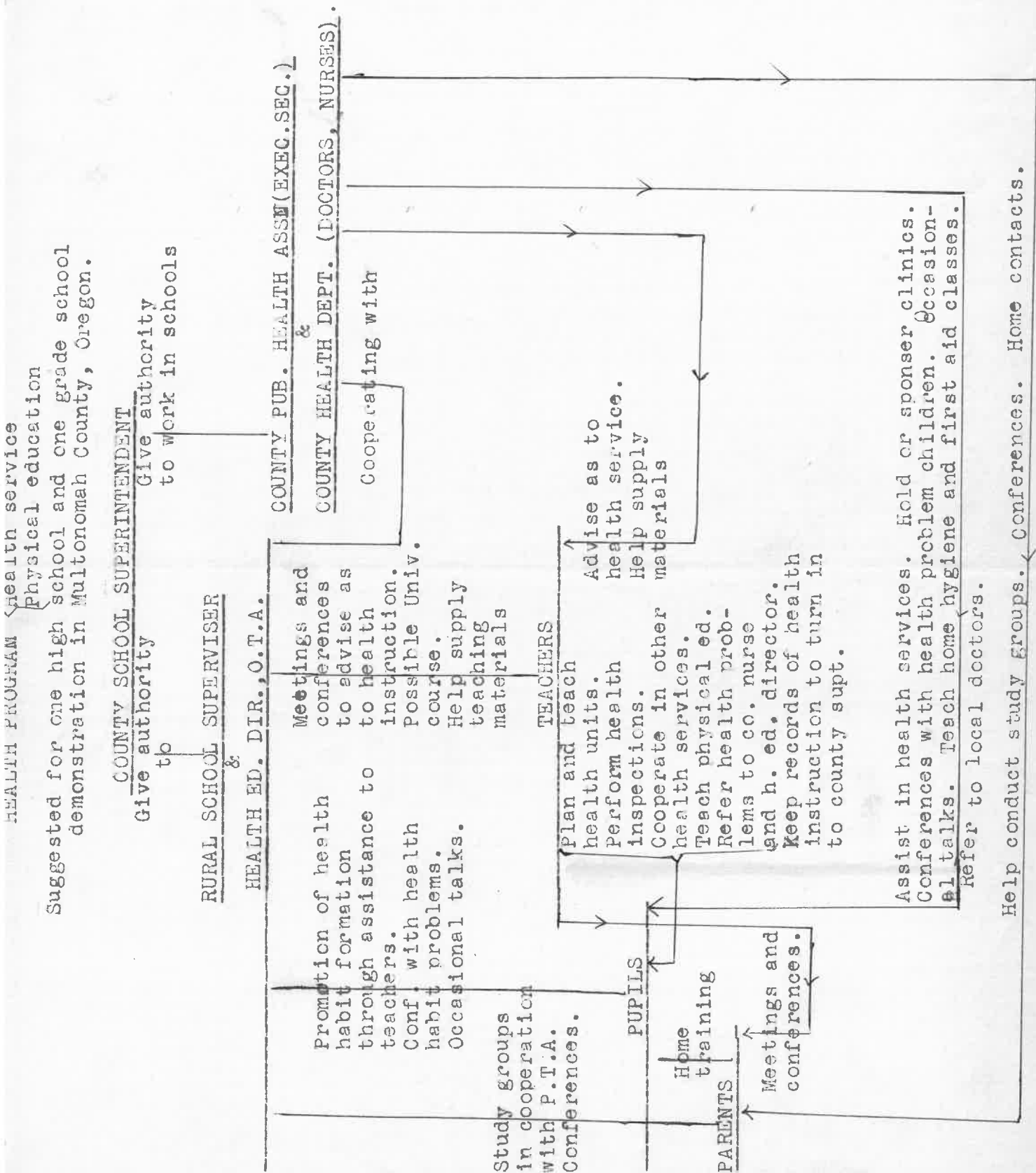
The lack of integration of the medical and nursing service can be accounted for through incomplete public health nursing education.

In the nutrition class -

This class was more successful in the known results, so far as the pupils were concerned, because of trained leadership, but failed in the correlation left to the responsibility of the upper grade teacher, possibly because the class was conducted in the intermediate room, while the upper grade teacher, who was also the principal, occupied himself with other duties.

Goals for the Future

- 1 - There is a definite need for the reestablishment of a course in health teaching methods for the teachers, which will be requested from the Extension Division of the University.
- 2 - Membership on the health committee of the high school of one or both sponsoring organizations, the public health nurse and an interested physician.
- 3 - A definite outline of health correlation with the subjects of the various departments of the high and grade school, and the inclusion of a bibliography of source material.
- 4 - More definite tie-up of the county public health nurse program with all health activities inaugurated or attempted.
- 5 - Continued effort to connect home and school through parent-teacher study clubs.



SUGGESTIONS FOR TEACHING HEALTH

Prepared by the following Public Health Nursing Students in the Portland School of Applied Sociology, University of Oregon, in the class, Methods in Health Education, spring term, 1932: Elizabeth Breakey, Naomi B. Carlton, Mary S. Cowell, Ruth Damskov, Ruth Ganiere, Edna May Gould, Helen Muzzy, Eva Schwitzer, Gladys Turley, Sibyl T. Walker.

Edited and distributed by the Oregon Tuberculosis Association
310 Fitzpatrick Building, Portland, Oregon

INTRODUCTION -

These suggestions were compiled with the purpose of offering to the teacher some ideas which might prove useful in planning health lessons, projects and units. No attempt has been made to give detailed outlines for teaching as it is more worthwhile for the teacher to plan the details himself or herself, so that health instruction will be an integral part of the curriculum, than to follow a ready made plan. Nor do the Suggestions comprise a complete course of study. Topics which should be included in a course of study are omitted and other topics that are included are not exhaustively treated. The teacher should use the suggestions offered, therefore, as supplementary to the state course of study in health. For a thorough guide to the habits, attitudes and knowledge which should be taught at the different grade levels, Health Behavior by Wood and Lerrigo is recommended. This book is an invaluable aid in planning objectives.

Care has been taken to include only items which measure up to approved educational and sound scientific standards. No information of an explanatory or scientific nature has been included as this outline has been limited chiefly to things to do. It is necessary, however, for the teacher to be sure of the scientific soundness of her facts before they are presented to the students. There is special need for guarding against misinformation promulgated by faddists and quacks. Health Education, prepared by the Joint Committee of the American Medical Association and the National Education Association, is recommended as a handbook of scientific information as well as for its practical teaching suggestions. Several informational references for teachers will be included in the references given for each topic.

The Standards for Choosing Health Materials included with these suggestions should be closely observed when selecting health materials for teaching purposes. These standards are based on those recommended by Miss Anette M. Phelan, Teachers College, Columbia University.

One should keep in mind that the chief goals of health education are to establish good health habits and attitudes and all health instruction should be directed toward these ends. Lessons should be well motivated, activities of a purposeful nature introduced and the satisfaction which comes only from well motivated, positive health teaching should be secured. Attempts should be made to introduce tactfully into the homes of the pupils some ideas relating to each health topic taught. This can be done in various ways such as talks at Parent Teacher meetings, personal conferences with parents, Parents' days at school on which the children tell and demonstrate some of the health facts they have learned children may make menu books, health books, health reminder posters or cards for putting up in the bedroom or bathroom (see Am I Ready For School Chart, Cleanliness Institute), and the like for taking home as presents to parents.

Each year's health program should begin with an informal survey or inventory taken by the teacher of the health needs and assets of the pupils, the school and the community. For this purpose a Teachers Inventory of Health Assets, published by the National Tuberculosis Association, can be secured from the Oregon Tuberculosis Association. The teacher will then be able to place the greatest emphasis in both the health teaching and the health service program upon the greatest needs.

Of paramount importance in the success of the health program is the attitude of the teacher. The teacher with a live interest in the subject will constantly be finding opportunities for introducing worthwhile health activities, stimulation of interest, and correlation of health with the other subjects. The teacher's example in keeping the health habits is also a most important factor in the training of the children.

Certain commonly used practices suggested by the authors which are suitable for use in teaching any of the health topics have not been included under the specific headings as they are more or less familiar to all teachers and space does not permit us to include everything. Some of these procedures are: Making health books, reading and writing stories, spelling words relating to health topics, making posters as art correlation, health conversation lessons in correlation with language, using lantern slides or films, sand table projects and others.

A partial bibliography in the form of references follows each topic. A more complete bibliography of health literature suitable for different grades will be available from the Oregon Tuberculosis Association in September.

* * * * *

NUTRITION

Introduction -

In making a survey of the health needs and assets find out which foods are most lacking in the diet, what dietary indiscretions, such as sweets between meals, are prevalent, what unhygienic eating habits are followed. Also note favorable circumstances relating to the children's food habits. The following plan might be followed in accomplishing this:

Before placing any emphasis upon what foods are correct, ask each child to tell, if he wishes, what foods he ate for breakfast, what the night before (tact must be used and no reprimands nor any special commendations given to individuals if truth is desired and unfavorable reactions are to be avoided), what things he likes to eat between meals and what he would choose if he could have just what he wanted for dinner. This information might be secured in a conversation period.

The teacher should eat with the children and find out what they bring or choose for lunch.

Starting with the emphasis on the greatest need, the program can then be worked out to cover the habits, attitudes and knowledge which should be acquired by the children in each grade as outlined by Wood and Lerrigo in Health Behavior.

Discretion should be used in setting standards suitable for the group. For instance, the maximum standard of a quart of milk a day might be too far beyond the possibilities of attainment of certain groups with financial limitations. In such a case it is wiser and more practical to emphasize the minimum standard of a pint.

Some meat is allowed in the diet of children and helps to add variety although it is not mentioned in the Wood and Lerrigo standards. It is not essential every day and should not be eaten more than once a day.

The weighing and measuring of children forms a good motivation for the practice of health habits, although a deviation from the average weight does not necessarily indicate malnutrition. Each child might have his own graphic chart showing the weight curve. These can be made and mimeographed. One sample chart can be secured free of charge by each teacher from the Oregon Tuberculosis Association and additional ones may be purchased for three cents each. Weigh every month if possible and at least three or four times a year to watch gain and growth. In the fifth and sixth grades children can begin weighing themselves and keeping their own charts under the teacher's supervision.

First and Second Grades

Children in these grades will be interested in hearing about foods that make them grow. They can be told they need food for:

- Energy for work and play
- Body building and repair
- Building bones and teeth
- Growth and health (vitamins).

Although no attempt should be made to give these children technical scientific information care should be taken that all information given them has a sound basis in scientific fact.

To give some idea of the vitamins, an adaptation of the story of Count Von Luckner taken from his book, The Sea Devil could be made interesting even to small children. He tells how he and his men were saved from scurvy by eating bananas. A reprint of the story can be secured from the United Fruit Company, Boston, Massachusetts.

It should be kept in mind that little children like repetition and this principle can be applied in health teaching as long as the teacher keeps a live interest in the subject.

Activities and Correlations

Ask Children to bring pictures of foods from magazines and paste them in a book, with a correct meal selected for each page. Care should be taken to see that the purpose of the plan is followed. If children and teacher lose sight of the objective, as sometimes happens in the making of a "health book" the result is not a health book at all but merely a collection of attractive looking foods containing, as often as not, a superabundance of those which should be eaten only sparingly.

Art - The above activity may be correlated with art. Pictures of foods may also be drawn and colored.

Spelling - Write names of foods, cut them out and select a correct meal from the words.

Arithmetic - Teach the cost of various foods. Add figures and find out the cost of a lunch. (See cafeteria suggestion in third and fourth grade suggestions).

Play - Teach building of strong, healthy bodies. (See Child Health, December 1931.)

Many subjects can be correlated in building a neighborhood store or a grocery store.

Third and Fourth Grades

In these grades the child should begin to feel more responsibilities toward his own food selection. Knowledge of the reasons for choosing the various types of foods should be increased. Fourth grade children can learn some simple facts about the composition of foods.

Care should be taken to present oft repeated topics, such as milk, in an interesting way.

Activities and Correlations

Breakfasts, lunches and dinners can be chosen and set up by the children from a supply of paper food models with standards so that they can be made to stand up. By attaching prices to the foods and playing cafeteria this activity can be correlated with arithmetic. Language, art, spelling and other subjects can be correlated with it also. Food models may be made by children in art class, cut from pictures in magazines and mounted on stiff paper or sets can be purchased. (See references).

The story of Rear Admiral Byrd's expedition to the south pole can be made use of to teach the importance of carefully selecting food and watching the diet in order to maintain and promote good health.

Pictures of milk fed animals and those receiving no milk or milk products may be shown and the differences pointed out.

Language - Write a story about the pictures discussed above. Write stories about the posters from the Health in Many Lands set published by the National Dairy Council and about other pictures and posters.

Geography - Discuss the Health in Many Lands posters and health habits of people in other countries as suggested by the book After the Rain from the Cleanliness Institute and the Milking Time in Many Lands posters and folders from the Dairyman's League Cooperative Association.

Art - Vegetables and fruits because of their attractive coloring lend themselves well to correlations in art.

Nature Study - Plant a small garden of vegetables. This may be used to stimulate an interest in the eating of vegetables and also to point out the fact that our bodies need certain foods for growth and repair just as plants need certain kinds of soil. After the vegetables are ready for use the children might prepare and eat them or serve them to their mothers at a party.

An interesting series of lessons can be planned from the book "Travels of a Rolled Oat" published by the Quaker Oats Company.

Fifth and Sixth Grades

The different classes of foods should be studied more completely than in the previous grades. The child should be made to feel still more responsibility for the selection of his own food even though he is supervised in the cafeteria or lunch room by an instructor. Posters will help the child to make a choice.

A meal planning project suitable for these grades is available from the California Dairy Council.

Activities and Correlations

A trip to a dairy or meat market are useful for teaching how food should be safeguarded. Some food borne diseases may be discussed. Discuss also laws concerning care of food.

Arithmetic - Problems involving costs of buying and selling foods. A method for each child to score his own diet is in the project mentioned above and can be used when percentages are studied.

Geography and History - Study foods in different lands and times.

Nature Study - See Third and Fourth grades also Nature Study and Health by Patterson.

REFERENCES:

Methods and Materials -

- #Baltimore Dairy Council - *The Boy and His Pets. (Suggestions for correlation) - Primary grades -----\$.05
- " " " *Explorers of the Air. (Suggestions for correlation) - Intermediate grades----- .05
(Brief account of Admiral Byrd's preparations included).
- Bey and Bayer *The Wonderful Cow that Really Is----- .35
The Dairymen's League Cooperative Assn.,
11 W. 42nd St., New York City.
- Brown, Maude A. Simplicity in Teaching Health -
Hygeia Magazine - October, 1927.
- #California Dairy Council Meal Planning Project.
- " " " The Neighborhood Store.
- Dairymen's League Cooperative Assn. -*Six Milk Posters with supplementary booklets:
The Cow Goes West with the Pioneer
The Cow Comes With the Viking
The First Milk Train
Milk Has the Right of Way
Peddling Goat's Milk
The Camel Feeds the Caravan
Posters----- .15 ea.
Booklets----- .10 ea.
- Hallock, Grace *Travels of a Rolled Oat - Free on request -
Quaker Oats Company, 80 East Jackson St.,
Chicago, Illinois.
- Hallock and Abbot Hob o' the Mill - Free on request -
Quaker Oats Company.
- #National Dairy Council *Health Habits, Suggestions for Developing
Them in Children -----1.00
For Grades One to Six.
(Envelope of materials included).
- " " " *Health in Many Lands - Set of 8 posters--\$.20
- " " " Lunch Room Study - Lower, Intermediate,
and Upper Grades. Distributed by the
California Dairy Council. Contains
suggestions for teaching various health
topics.
- #All National and Baltimore Dairy Council material is distributed on the Pacific
Coast by the California Dairy Council, 216 Pine Street, San Francisco, Calif.

*All references checked thus are available to educators in Oregon
from the Oregon Tuberculosis Association at the prices listed.

#National Dairy Council

*Milking Time in Many Lands
and Supplementary Folders -
Two posters with four countries
represented on each-----\$.25 ea.
Eight folders, with pictures
to be colored and story in
each -----\$.10, for set
of 8.

National Food Bureau

*Blackboard Lessons on Food-----Free

Oregon Tuberculosis Association

*Child Health Magazine - November and
December issues devoted to nutrition.

Read and Lea

The Story of Grandfather's Farm -
Scribner and Sons Publishing Co.

Roberts, Lydia J.

*Food Models - University of Chicago
Bookstore. Book containing 88 pic-
tures of foods to be colored and
cut out and used for practice in
meal planning-----\$.75

Sauers, Edith

Teaching Health and Nutrition In
the School Cafeteria. Reprinted
from - The Nation's Schools,
June 1929, Vol. III, No. 6.

Thomas, Lowell

Count Luckner, The Sea Devil.
Doubleday Doran and Company.

*Reprint pp. 260-264, story of curing
of scurvy with bananas, United
Fruit Company, Boston, Mass.--- Free

Hallock, Grace

Dramatizing Child Health -
American Child Health Association,
450 Seventh Avenue, New York City.

Oregon Tuberculosis Association

*Weighing and Measuring School
Children - Condensed from paper by
Dr. C. E. Turner----- Free.

Scientific and Informational Subject Matter:

Books -

Bogert, L. J.

Nutrition and Physical Fitness -
Saunders Publishing Company.

McCollum and Simmonds

Food, Nutrition and Health -
The Authors, Baltimore.

Rose, M. S.

Foundations of Nutrition -
Macmillan Publishing Company.

All National and Baltimore Dairy Council material is distributed on the Pacific
Coast by the California Dairy Council, 216 Pine Street, San Francisco, Calif.

* All references checked thus are available to educators in Oregon from the Oregon
Tuberculosis Association at the prices listed.

Books - continued:

Sherman, H. C. and Smith

The Vitamins - Second Edition,
1931.
Chemical Catalogue Company.

Bulletins and Pamphlets:

Gillett, Lucy H.

*Diet For The School Child---\$.05
Bureau of Education - Dept. of
the Interior, Washington, D.C.

" " "

Food for the Family -
American Association for Improv-
ing the Condition of the Poor,
105 East 22nd St., New York City.

Oregon State Board of Health

Lists of Nutrition Publications-
Bureau of Public Health Nursing
and Child Hygiene, 816 Oregon
Building, Portland, Ore.---Free.

Oregon State College

Lists of Nutrition Publications-
may be secured from the Oregon
State College at Corvallis.
-----Free.

Oregon Nutrition Council (compiled by)

*List of Suggested Readings in
Nutrition-----Free.

Sherman, H. C.

The Problem of Sweets for
Children -
Reprint from American Child
Health Association, 450 Seventh
Avenue, New York City.

*Available to educators in Oregon from the Oregon Tuberculosis Association at the
prices listed.

* * * * *

SLEEP AND REST

Introduction -

It is important for all children to learn not only the value of
sufficient sleep and rest, but also how to relax. It would be well for the
teacher to require a ten minute relaxation period of all pupils at which time
they could learn how and the values of relaxing. They might relax by lying
their heads on their arms on the tops of their desks with their eyes closed.
If they are taught to realize the value of this and to do so voluntarily
(outside of school) it would aid them in later life when the tension of daily
living has increased.

Primary Grades

Emphasize such points as:

1. Sleep and rest help young children and animals to grow.
2. Sleep and rest give the child a chance to get strong again after he has grown tired.
3. Children rest better if they sleep with windows open or out of doors.
4. Children rest better in a dark, quiet place than in a light, noisy place.
5. When other people are resting or sleeping, children should try not to disturb them.
6. How many hours children at different ages should sleep.

Activities and Correlations

The relaxation period at school offers a real situation in connection with which many lessons can be taught.

Arithmetic - Add number of hours in bed for week.

Nature Study - Compare animal habits of sleep.

Music - Sing sleep songs.

Intermediate Grades

Emphasize points as above and see Health Behavior, by Wood and Lerrigo for additional ones.

Activities and Correlations

Build a house with model bedrooms and right number of bedrooms to accomodate people who are to live in house. Several subjects as manual training, art, arithmetic, etc., can be correlated with this activity.

Arithmetic - Find average number of hours in bed for week.

Geography - Study rest and sleep habits in different countries.
Discuss effect of climate on activity.

Nature Study - Sleeping tendencies in plants.

Upper Grades

Teach more about the simple physiology of sleep than in the lower grades. Study effects of lack of sleep.

Activities and Correlations

Make a model bedroom.

Geography - Give a puppet show, showing dolls from each country. Ways of sleeping told in verse or song.

Arithmetic - Teach varying amount of time required for sleep and rest for different ages and varying amount of energy expenditure in growth and activity.

Nature Study - Relate experiments done on animals such as: White mice deprived of sleep for four days after which animals died.

History - Effects of industrial revolution upon habits of sleep, health of worker, increase of accidents.

Fatigue as a social problem: Child Labor Laws, eight hour day, increase of accidents in later hours of day when fatigue is greatest.

REFERENCES:

Methods and Materials -

Roberts, L. J.

Teaching Health Through the School
Lunch - Article #4, Sleep.
Normal Instructor and Primary Plans,
January 1931. Reprint available
from California Dairy Council, 216
Pine Street, San Francisco, Calif.

Wedgewood, H.

*Sleep - Department of the Interior,
Bureau of Education, Washington, D.C.
(Story of Little Girl Who Grew Smaller, in this
pamphlet, not suitable for teaching purposes
because of negative nature and unscientific
basis for establishment of health habit.
Other material useful) -----\$.05

Scientific and Informational Subject Matter:

Book:-

Laird and Muller

Sleep - John Day Publishing Co.

Pamphlet:-

Reynolds, Nora

*Sleep and Rest - Why We Need Them -
National Tuberculosis Association
-----\$.05

Other Material -

*Sleep Poster from Health in Many Lands Set - See Nutrition References.

*Available to educators in Oregon from the Oregon Tuberculosis Association at the prices listed.

AIR AND SUNSHINE

Introduction -

Children should be taught the value of air and sunshine to health, and methods of securing these things to as great an extent as possible indoors as well as activities which can be enjoyed outdoors.

The part played by sunshine in the proper nutrition of the body should also be taught when the subject of nutrition is discussed.

Primary and Intermediate Grades

Activities and Correlations

Teach interesting activities and games that are performed in the fresh air and sunshine.

To study ventilation have children cut holes for windows in sides of shoe box. Place a lighted candle in the box with all holes closed, then have children experiment by taking out coverings over windows one at a time to see which way air circulates best.

Nature Study - Show need of growing plants for sunshine. Plant some seeds, place some in the light and others in the dark and note difference in plants.

Baby animals crawling toward sunlight; flowers often turning toward sunlight - this can be demonstrated by putting plant in window and turning every day or so to note that leaves tend to turn toward light.

Fourth grade may begin study of physiology of blood system and lungs and show need of lungs in purifying air for blood.

Upper Grades

Activities and Correlations

Health and Physiology - Study rickets as a deficiency disease; lung structure and use of oxygen; ventilation, stressing moisture, movement and temperature rather than oxygen or carbon dioxide content. Make interesting studies of good ventilation then draw system of own school. Arrange tours through large buildings for purpose of examining ventilating systems. Secure some petri dishes prepared with agar media. Expose half of them in a dark, damp closet or crowded room for several minutes and the rest in a park or open country for the same length of time. Place all in a warm place or incubator for 24 or 48 hours. Note the difference in colony formation or mold growth. The purpose of this experiment is to bring out the value of sunlight as a cleansing agent.

Manual Training - Construction of windows. Study of exposures.

Sewing - Making of curtains and drapes, types of materials to use.

Little Mothers Class - Value of light treatments and proper ventilation.

Reading - Supplementary reading about authentic experiments - e.g.,
Dr. Trudeau and his rabbits inoculated with tubercle bacilli.
Those living in damp, dark hutches developed the disease,
those living in sunnyn dry ones did not.

Catchy drawings or signs may be used to advantage, if not overdone,
in stimulating the interest of the upper grades.

References: Included with references on Cleanliness.

CLEANLINESS

Introduction -

Children should be taught cleanliness habits to help secure and maintain health and efficiency and should be taught to think of the joy, pleasure and satisfaction to themselves and others which come from being clean.

It is essential that the school have adequate facilities for keeping clean so that habits taught can be practiced. The teacher should be an example of cleanliness and neatness.

Excellent suggestions and materials for teaching this subject can be secured on request from the Cleanliness Institute, 45 E. 17th St., New York City.

Primary and Intermediate Grades

Activities and Correlations

Morning inspection can be utilized as a motivation for cleanliness teaching. Use a mirror so that the children can inspect themselves and learn critical judgement of themselves. Rhyme suggested by Miss Raymond of the Cleanliness Institute for children to use when "asking" the mirror what it thinks of them: "Mirror, mirror on the wall, Do you see any dirt at all?"

If the children inspect for other things than cleanliness, as they should, they may use other little rhymes as: "Mirror, mirror on the wall,
Am I standing straight and
tall?"

Children may make a doll house out of crates or boxes. Learn how to keep house clean, care of children (dolls) who live in house. This may be developed into an extensive unit by correlating with the other subjects and having a variety of activities in connection with it as measuring materials for use in making house, in arithmetic, writing stories and letters about it, etc.

Language - Write letters to soap manufacturers for pictures and reading materials to be used in booklets and posters. Write stories for booklets. Be sure to have the children give the teacher's name when writing for materials.

Art - Make posters for health rooms, halls and lunch rooms. Fold paper drinking cups and napkins. Make scrapbooks on cleanliness.

Nature Study - Cleanliness habits of animals.

Upper Grades

Activities and Correlations

Civics - Study sanitation, cleanliness of cities, laws relating to different markets, stores, sewage disposal and sale of all foodstuffs, especially milk. Relation of personal cleanliness to community health.

REFERENCES ON AIR, SUN AND CLEANLINESS:

Methods and Materials -

Cleanliness Institute, 45 East 17th St., New York City.

*Animal Way	For primary grades-----	\$.25)	Single
*After the Rain	For intermediate grades-----	.25)	copy
*A Tale of Soap) free, if
and Water	For upper grades-----	.25)	ordered
*The Judd Family	" " " single copy free		directly
*Suggestions From Teachers	" " "		from
*Am I Ready For School Chart	" " "		Cleanli-
Other materials.			ness
			Institute.

Haviland	The Most Wonderful House,
	J. P. Lippincott Co.
"	Good Neighbors - J. P. Lippincott Co.

Winslow and Hahn	The New Healthy Living - Merrill Company.
------------------	---

Scientific and Informational Subject Matter -

Books:

Blunt and Cowan	Ultra Violet Light and Vitamin D - University of Chicago Press.
New York Commission of Ventilation	School Ventilation - Bureau of Publications, Teachers College, Columbia University.
Ritchie	Primer of Sanitation - World Book Company
Ritchie and Caldwell	Primer of Hygiene - World Book Company
Turner and Collins	Community Health - Heath Publishing Co.
Wood and Hendriksen	Ventilation and Health - Appleton Company

Pamphlet:

Wood and Hendriksen	*Fresh Air in the Schoolroom - Public School Publishing Co.-----\$.05 (Schoolroom Temperature Chart included)
---------------------	---

POSTURE

Introduction -

One writer has said, "There is probably only one aim of posture education: To help the children attain and maintain habitual good sitting, standing, walking and lying positions."

Books and pamphlets describing correct posture, tests for posture and chief causes of poor posture are listed in the references.

If a child with poor posture is manifestly undernourished, first try to see that his nutrition is improved. If possible, prevent poor posture habits from becoming established while health is being improved.

The observant teacher will notice whether or not the seats are of proper height for each child and that they are comfortably seated, that lighting is correct, ventilation good and that activity breaks the monotony and prevents tired slumping in the seats.

Children should learn to inspect seats to see if they are correct for sitting.

Primary Grades

Activities and Correlations

Posture may be studied in connection with the study of the Indian. Children should be taught the proper way to stand, sit and walk. They should actually practice these things and do postural exercises. Stories and poems of a positive nature prove helpful. Children should be taught to notice good posture both in pictures and in real life.

Nature Study - Pupils may bend and tie out of position a growing plant or sapling and keep it in this position for some time to show how poor posture may become fixed. They may also experiment on plants to find why they droop when they do not have the proper amount of water, food and sunshine. (Exact analogies cannot be drawn between plant and animal life, but some comparisons can be made and the study of plants can serve as a motivation for the teaching of such phases of health as posture).

Intermediate and Upper Grades

Activities and Correlations

Manual Training - Make footrests for the children in the school whose feet do not touch the floor.

Geography - Observe and discuss the posture of sailors and soldiers from different countries. Study shoes of different countries as Holland and China and of peoples as the Indians.

A study of feet and shoes should be made since posture and foot health are closely related. The children can make footprints by wetting the soles of their feet and standing on a blotter or piece of brown paper. Trace around the imprint with a pencil and compare to the prints of normal and flat feet, which are found in hygiene textbooks or pamphlets on foot health. Have children stand with heels and toes together to find if the great toes meet.

Have a shoe exhibit. Collect pictures and different types of shoes. Correlate with geography (shoes from different countries) and other subjects.

Study effect of clothing on posture.

References - Included with references on clothing.

CLOTHING

Introduction -

Since the proper clothing has so much to do with good posture the two may be considered together. In addition to its effect upon posture, other aspects of clothing influencing health, such as correct clothing for climate and temperature, materials best suited for different purposes, etc., should be studied.

Primary Grades

Children in these grades usually do not have a great deal of control over their choice of clothing; nevertheless, they should be taught something about the effects of clothing on health and the kinds of clothing suitable under such conditions as those suggested in the introduction, for it is important to begin developing the right attitudes toward clothing. Children should be taught to remove all outdoor clothing in the schoolroom and should be encouraged not to wear garments really intended for outdoor wear, as heavy sweaters, which they are unable to remove indoors. Parents' cooperation should be obtained through home contacts and Parent Teacher meetings.

Activities and Correlations

Topics for conversation lessons: Kinds of clothing suitable for different temperatures, weather conditions and so forth; part played by clothing in protecting the body from dirt, injury and infection. Importance of clean clothing; comfort and hygienic value of well fitting clothing.

Spelling - Compile list of animals and plants from which materials are made and of materials from which clothing is made.

Geography - Observe materials out of which their own clothes are made, what plants or animals they came from and from what part of this country or what foreign country. Observe how people in other lands dress.

Tell stories of different fabrics. Give interesting title as "Cotton--The King of Fabrics" and build around it an interesting and practical story such as the steps involved in the making of cotton cloth from the plantation to the mill. The steps can be illustrated with pictures or actual samples of parts of the plant, if available. Children may write to children in a school in a cotton growing state and offer to exchange some samples of Oregon products for samples of the cotton plant. Samples of different kinds of cotton materials should also be used.

Intermediate and Upper Grades

Children in these grades will be more likely to have a responsibility in the selection of their own clothes and further training along these lines should be given. In home economics classes they may have the actual opportunity to make some simple garments for themselves or their younger sisters or brothers.

Activities and Correlations

Arithmetic - Work series of problems on cost of clothing and laundry bills. Prices of materials and yardage may be used for practical problems.

Art - Make posters with cloth clothing chosen from various samples brought by the children for the clothes of the figures.

REFERENCES On Clothing and Posture

Methods and Materials -

American Posture League, 1 Madison Ave., New York City - Educational Material.

Brock, G. D. Health Through Projects -- A. S. Barnes and Co.

Government Printing Office, Washington, D.C. - *Posture Standards - (Posters showing excellent, good, poor and bad posture for thin, intermediate and stocky types; set of three for boys and three for girls, ----- \$.35 per set.

Klein *Posture Clinics -- U. S. Dept. of Labor,
Children's Bureau,
Washington, D. C.-----\$.15

Klein and Thomas *Posture Exercises-- U. S. Dept. of Labor,
Children's Bureau, Washington, D. C..\$.10

Metropolitan Life Insurance Company - How To Live Long
" " " " *Standing Up to Life

REFERENCES On Clothing and Posture - continued

Methods and Materials -

Oregon Tuberculosis Association

- *Child Health Magazine, April, 1932
Feb., 1932

" " "

*How Do You Walk? - pamphlet with
posture standards and comments.
Free.

" " "

Lance and Shield, (Clothing),
Feb., 1928.

Worthing and Matthews

- Our Clothing - F.A. Owen Co.

Scientific and Informational Subject Matter -

Books:

Keene, C. H.

Physical Welfare of the School
Child - Houghton Mifflin Co.

Laird and Muller

Sleep - John Day Publishing Co.

Meredith, F.

Health of Youth - Blakiston Co.

Richardson and Hearn

The Preschool Child and His
Posture - Putnam Publishing Co.

Pamphlet:

Schwartz, L.

A Resume, With Comments, of the
Available Literature Relating
to Posture - United States
Government Printing Office,
Washington, D. C.

MENTAL HYGIENE

Introduction -

Teachers, especially in the primary grades, have great influence
for good or evil over mental health of children.

Teach children to relax completely when attention or study is not
required - e.g., just before lunch period and once in between afternoon
classes.

Stress the importance of regularity in habits. Give due praise for
accomplishments, but do not overpraise or accustom children to work for praise
alone; encourage success in activities in which children have special talents
or aptitudes. Make an effort to see that every child succeed in something,
however simple.

Teachers should be consistent and reasonable in their discipline
and requirements, and radiate kindness and humor in the daily routine tasks
and aptitudes toward life.

Teach the necessity of concentration on work until finished, of being cheerful and friendly to other people. Encourage feeling of responsibility in choosing and completing own task and freedom to work on it.

Avoid the use of materials and methods which violate the child's right to security by appealing to the fear motive.

Activities and Correlations -

All Grades

Reading and Literature - Read stories that are cheerful, humorous, that stress group action and self dependence and that tell of interesting activities of happy children. Stories which show unselfishness with toys, obedience to parents, how to play happily with other children, etc. might be used.

Nature Study - Teach kindness toward animals. Explain away fears of animals, dark and other natural phenomena. Sex instruction may also be given to a certain extent in nature study.

Geography - Study customs and habits of people in other lands in order to gain a better understanding of people who may seem different from the rest of us and to help develop tolerance.

Spelling - Learn the meaning and uses of such words as: honesty, sincerity, unselfishness, etc.

History - Study of lives of heroes. Discuss desirable traits and characteristics.

Gymnasium and Playground Activities - Learn to play together happily. Cultivate good sportsmanship and cooperation with fellows. Learn to be a good loser, to "give and take", to control the tongue for today, etc. Teacher must show fairness and help each child to adjust himself.

REFERENCES

Methods and Materials -

Benedict, A. E.

Children At The Crossroads -
The Commonwealth Fund, Division
of Publications.

Massachusetts Society for Mental Hygiene - *Habit Training for Children---\$.05

Metropolitan Life Insurance Company - *Health Heroes Series-----Free

National Committee for Mental Hygiene, 450 Seventh Avenue, New York City. - *Behavior Problems of School Children -----\$.15

National Committee for Mental Hygiene - Mental Hygiene - Quarterly Journal

" " " " " - *Mental Hygiene in the Classroom -----\$.15

" " " " " - Suggestions for Reading in Mental Hygiene.

" " " " " - Other Educational Material.

*Available from Oregon Tuberculosis Association, to educators in Oregon, at prices listed.

REFERENCES - continued

Scientific and Informational Subject Matter -

- | | |
|----------------------------------|---|
| Blanton and Blanton | - Child Guidance, Century Publishing Company |
| Burnham, W. H. | - The Normal Mind, Appleton Publishing Company |
| Groves and Blanchard | - An Introduction to Mental Hygiene, Holt Company |
| Irwin and Marks | - Fitting the Child to the School, Macmillan " |
| Mearns, H. | - Creative Youth, Doubleday, Doran and Company |
| Menninger, K. and Crawford, N.A. | - The Healthy Minded Child, Coward-McCann Co. |
| Sayles, M. B. | - The Problem Child in School, Commonwealth Fund |
| Thom, D. | - Everyday Problems of the Everyday Child,
Appleton Publishing Company |
| Zachry, C. B. | - Personality Adjustment in School Children,
Scribner Publishing Company |

DISEASE PREVENTION

Introduction -

Since the prevention of disease embraces resistance to illness, we find that we are involved in teaching all the health habits in order to teach disease prevention. All parts of the program must be unified in order to take advantage of every opportunity to tuck in one more lesson for our younger generation.

The school health service should be made to take on meaning for the school child. The children in the primary grades should become acquainted with the school nurse and doctor in a pleasant way. If they have an office in the school, the class may be taken for a visit, otherwise the doctor and nurse should visit the classroom and give a brief pleasant talk or tell a story.

Rural teachers can secure the services of the county health officer in helping to prevent communicable disease and of the county nurse in counties that have one. These individuals can also help guide the teacher to select scientifically sound materials and information to present to the children.

The teacher should help the children learn about the work of the school doctor and nurse and how they can cooperate with them.

Daily morning inspection (see section on cleanliness) is an important aid in the early detection of signs of communicable disease. Teachers should know and obey the state laws with regard to exclusion of children with such diseases and should cooperate in this respect with county health officers and nurses.

The school nurse cooperating with the teacher can help show the children the reasons for and the value of such things as the steps taken to prevent contagion, immunization, inspection, physical examinations, etc. Her contacts through clinics, meetings and home calls can be made to help serve to educate the parents and other members of the community to understand the health work of the school and to realize the value and means of carrying out preventive and protective measures.

Children in upper grades, especially in rural schools where all the grades are in one room, may be taught to assist in the inspections and to help the little ones to learn to report suspicious rashes, sore throats, etc. This will help develop intelligent responsibility in performing their own health habits also.

Activities and Correlations -

Advantage should be taken of such situations as the organization of an immunization clinic in the school or the launching of an early diagnosis campaign by the state tuberculosis association to stimulate an interest in the study of disease prevention.

Nature Study or Science - Learn (upper grades only) about germs, both good and bad, and conditions conducive to their growth and activity.

History - Lives and accomplishments of such health heroes as Walter Reed, Louis Pasteur, Edward Jenner, Florence Nightingale, Edward Trudeau, etc. Relation of the conquest of disease to advancement of civilization.

Civics - Governmental machinery for control of communicable diseases in modern communities. Study local laws for control of disease.

Geography - Importance of taking typhoid serum before traveling in places where sanitation of water and food is uncertain.

REFERENCES

Methods and Materials -

- | | |
|----------------------------------|--|
| Andress and Brown | - Science and the Way to Health, Ginn and Co. |
| *Cleanliness Institute | - Hitch Hikers ----- Free |
| Cleanliness Institute | - The Strange Case of Mr. Smith |
| *Metropolitan Life Insurance Co. | - Yesterday and Today --- A rebus for interesting primary grade children in diphtheria immunization ----- Free |
| Wood and Rowell | - Health Supervision and Medical Inspection of Schools, Saunders Publishing Company |

*Available from the Oregon Tuberculosis Association.

REFERENCES - continued

Scientific and Informational Subject Matter -

- | | |
|---------------------------------|--|
| DeKruif, P. | - Microbe Hunters, Harcourt Publishing Co. |
| Baynes-Jones, | - Man and Microbes, Williams and Wilkins Co |
| Metropolitan Life Insurance Co. | - Pamphlets on Communicable Diseases |
| Newsholme, Sir Arthur | - The Story of Modern Preventive Medicine,
Williams and Wilkins Company |
| Oregon Tuberculosis Association | - Pamphlets and Books on Tuberculosis |
| Park and Williams | - Who's Who Among the Microbes, Century Co. |
| School Laws of Oregon, 1931 | - Code Nos.: 35-110, 59-401 |
| State Board of Health | - Pamphlets on Communicable Diseases |
| Williams, J. F. | - Healthful Living - Revised Edition,
Macmillan Publishing Company |
| Wood and Rowell | - Health Through Prevention of Disease,
World Book Company |

GENERAL REFERENCES

Textbooks and Readers -

- | | |
|--------------------------------|---|
| Andress | - Summer Fun, (Grades One and Two),
Ginn and Company, Publishers |
| Andress and Bragg | - The Sunshine School, Ginn and Company |
| Andress and Evans | - Health and Good Citizenship -- Grades
6 and 7 -- Ginn and Company |
| " " " | - Health and Success -- Grades 4 and 5 --
Ginn and Company |
| Bigelow and Broadhurst | - Health For Every Day -- Revised Edition,
Grades 4 and 5 -- Silver, Burdett Co. |
| " " " | - Health In Home and Neighborhood -- Revised
Edition, Grades 5 and 6 --
Silver, Burdett Company |
| Burkhard, Chambers and Maroney | - Health Habits - Books I and II --
Intermediate Grades -- Lyons & Carnahan |
| " " " " | - Health Stories and Practice -- Third Grade
Lyons and Carnahan Company |
| " " " " | - Personal and Public Health -- Upper Grades
Lyons and Carnahan Company |

- Haviland - The Most Wonderful House in the World --
Grade 4 -- Lippincott Publishing Company
- " - The Play House -- Grades 4 and 5 --
Lippincott Publishing Company
- Oregon Tuberculosis Association - Child Health Magazine----- Free to educators
in Oregon.
- Patterson, A. J. - Nature Study and Health Series -- Grades 1-6
McKnight and McKnight, Publishers
- Turner, C. E. - Principles of Health Education , Heath Co.
- Turner and Collins - Malden Health Series -- Heath Publishing Company
- Cleanliness and Health -- Intermediate Grades
 - Community Health -- Grades 7 and 8
 - Health -- Intermediate Grades
- Turner and Hallock - The Voyage of Growing Up -- Grades 3 and 4 --
Heath Publishing Company
- Turner and Pinckney - In Training for Health -- Grade 4 --
Heath Publishing Company
- Williams and Dansdill - Wholesome Living Series -- Sanborn Publishing Company
- Health and Control -- Intermediate Grades
 - Health and Happiness -- Primary Grades
 - Health and Ideals -- Upper Grades
 - Health and the Rules of the Game -- Primary
 - Health and Service -- Intermediate Grades
- Winslow and Hahn - The New Healthy Living - Books I and II -
Intermediate Grades -- Merrill Publishing Co.

(See bibliography from the Oregon Tuberculosis Association, available September 1932
for more extensive list of literature).

General Source Material -

- | | | |
|--|---|---------|
| American Child Health Association | - Principles and Practices in Health Education | |
| American Medical Association
535 North Dearborn Street, Chicago. | - Hygeia, The Health Magazine | |
| Broadhurst and Lerrigo | - Health Horizons -- Silver, Burdett Co. | |
| Brock, G. D. | - Health Through Projects -- Barnes Co. | |
| Chayer, M. E. | - School Nursing -- Putnam Publishing Co. | |
| Chicago Principals' Club | - Fifth Yearbook- 1930 | |
| Cobb, W. F. | - Values and Methods in Health Education -- Row, Peterson and Company | |
| Harvey, B. C. H. | - Simple Lessons in Human Anatomy -- American Medical Association | |
| Hill, H. W. | - The New Hygiene -- Macmillan Company | |
| Keene, C. H. | - Physical Welfare of the School Child -- Houghton Mifflin Publishing Company | |
| *National Education Association
and
American Medical Association | - Report of the Joint Committee on Health Education----- | \$1.25 |
| National Safety Council
1 Park Avenue, New York City. | - Safety Education Magazine | |
| School Laws of Oregon, 1931 | - Code Nos. 35-2401, 59-401, 59-1501-----
59-1513, 35-3301, 35-3304, 35-3101-----
35-3108, 35-4301, 35-4325, 35-2101,
35-2112, 35-1208, 46-2001, 46-2007,
46-1915, 35-3502, 35-3503, 59-2101,
59-2102, 35-3201-----35-3204, 35-2907,
35-3401-----35-3405. | |
| State Course of Study in Health Education | | |
| Wood and Lerrigo | - Health Behavior -- Public School Publishing Company | |
| " " " | - Teaching How to Get and Use Human Energy, Public School Publishing Company | |
| *Wootten, K. | - A Health Education Procedure -- National Tuberculosis Association--- | \$1.00. |

ASSOCIATIONS FROM WHICH MATERIALS MAY BE SECURED

American Child Health Association - 450 Seventh Avenue, New York City
American Medical Association - 535 N. Dearborn St., Chicago, Ill.
American Posture League - 1 Madison Avenue, New York City
Bureau of Nursing and Child Hygiene- Oregon Building, Portland, Oregon
Cleanliness Institute - 45 E. 17th Street, New York City
Metropolitan Life Insurance Company- Madison Square, New York City
National Committee for Mental Hygiene- 450 Seventh Avenue, New York City
National Safety Council - 1 Park Avenue, New York City
Oregon Social Hygiene Association - Oregon Building, Portland, Oregon
Oregon Tuberculosis Association - 310 Fitzpatrick Block, Portland, Ore.
State Board of Health - Oregon Building, Portland, Oregon

SAMPLE UNITS

We are grateful to the authors of these units
for permission to include them here -

Oregon Tuberculosis Association.

Primary Health Project
By Mrs. Marie Priest
Hillsboro Public Schools

I - The schoolroom:

Is it always kept neat and clean, free from dust, orderly; is it attractive to the eye, or does it have a helter-skelter appearance?

The children can help the teacher in keeping house. Every child upon first entering school should form the habit of good housekeeping by being taught to care for his or her desk, and this task taken note of daily. Often we insist on neater personal appearance, without regard as to the manner in which they keep their own little house -- the desk. Some child could be appointed from time to time by the teacher to assist in the inspection of desks after school hours, and the tidying up of the school room in general. Here is an opportunity for teacher and pupil working together for beautification by change in arrangement of pictures, or something new every day, thus cultivating a habit of observation for things artistic which might function productively in adult life.

Primary Health Project continued -

II - Cloak-rooms:

- A. Are the children taught the care of their outside wraps ?
- B. What can the children do to help ?
 - 1. Each can bring his or her own coat hanger.
 - 2. Some child can be made responsible for the inspection of the cloak-room.

III - Lunches:

- A. Is there a suitable bench or stand for taking care of the lunches, and is it within the teacher's observation ? (Lunches are often stolen or molested by dogs or children).
- B. Are the lunches sufficient in quantity or quality at the midday meal ?
The children may study with the teacher just what a good diet consists of. This can be coordinated with the language and art work. Children may make booklets depicting wholesome, simple, yet nourishing meals for the best development of their growth, with the hope of having this interest carried over into the homes and enlisting the cooperation of the parents as to a better diet for the family.

IV - Sleep and Rest:

(Children in primary grades should get eleven hours of sleep, in a quiet, dark room with plenty of fresh air.)

- A. How many sleep with the windows open ?
- B. How can children help ?
 - 1. By obeying their parents when asked to retire.
 - 2. By appearing promptly at school with a bright and restful countenance.

(Here again the teacher has a part to play, for if she is in doubt about a certain pupil who seems nervous, listless, or fatigued, a visit to the home and a talk with the mother concerning Jonny's health and his school work sometimes bridges the gap that might mean success or ruin to his future progress. Half the battle is won if you can get the cooperation of the parent concerning the physical as well as the mental health of the child. Everyone recognizes now the necessity of habit training in children from early infancy).

V - Posture:

- A. The teacher herself should be an example.
- B. The seats should be adjusted to the stature of the child to make good posture possible.

VI - Light:

- A. Is the lighting proper ? (Enough light for the pupils at all the desks to read with comfort, protection from glare, no pupil sitting where direct rays shine in his eyes, and no cross lights on opposite sides of the room). If tables and chairs are used do not seat pupils facing windows.

VII - Sight:

- A. Do some of the pupils give evidence of having poor vision ?
(Pupils should be able to read what is on the board without difficulty from the back of the room. They should not hold the book too close to the eyes, nor squint when reading).

VIII - Hearing:

Sometimes a child seems dull or inattentive because he is having difficulty in hearing what the teacher says.

IX - Teeth:

- A. Inspect teeth and note those who have teeth which seem to need attention. These cases, when found should be referred to the County Nurse or the Health Officer.

X - Prevention of Communicable Diseases:

- A. Maintain a constant watchfulness for symptoms of colds, eruptions on skin, pallor, flushed faces, --- yea, and even uncleanliness, scab on head, and lice !
B. A delicate or sickly child should not be placed opposite or facing another child.

XI - The teacher:

- A. Is she always neat in appearance ? And is her attitude at the beginning of each day cheerful and enthusiastic, or does she appear with nerves all on edge because of loss of sleep and rest due to unduly late hours ?
B. Is her health what it should be ? Is she below normal weight and vitality ? What is she doing to correct this ? How can she proclaim health to others when she is not healthy herself ?
C. Progressiveness ----- Is she trying to broaden her field of vision ? Does she inspire her pupils with a student's attitude of mind ? (I once heard a teacher say: "Oh, what's the use of taking University work -- it won't help me as a primary teacher !"). Children tend to imitate their parents and teachers, not only in appearance and habits, but in attitudes.

The health services outlined above should be accompanied by sound health instruction so that they become meaningful to the children and so that they will be enabled to develop good health habits and attitudes.

Vegetable Unit - Third Grade

(May be adapted to First and Second Grades)

By Mrs. Blanche Bride, Hillsboro Public Schools

Aims:-

1. To create a favorable attitude toward vegetable eating.
2. To send children home with the determination to eat vegetables every day.

Children should know the following purposes of food:

1. Builds the body.
2. Is fuel for the body.
3. Keeps the body in running order.

Materials:- Colored pictures of vegetables. Have children name vegetables. Let children talk about the vegetables, ones which grow in their gardens, ones which mother cooks often and those that they like best.

Develop pleasant attitude toward vegetables - Vegetables are lovely to look at, note the green, orange and red colors, etc.

Plan a shopping tour to a vegetable market. Have children name the various vegetables displayed. Buy a vegetable, preferably one which is not liked by all of the children, which is to be prepared and served in the classroom.

Discuss how children may learn to like foods that they do not like and which are good for them - by practising eating a little each time mother prepares it. A small amount may be mixed with mashed potatoes until the child becomes more accustomed to it. Gradually increase amount until he can eat a whole portion. Explain that this may take time but child who really tries can learn to eat foods not previously liked. Discuss fact that a good sport will try. Encourage all children who do not like some vegetables to try.

Activities:-

1. Crayola coloring of vegetables.
2. Make charts using colored advertisements of foods including vegetables.
3. Make Good Health booklets.
4. Form a Good Health Club.
5. After shopping tour to market prepare (have children prepare if possible) vegetable. If it is impossible to cook a vegetable, such as one of the green, leafy ones, carrots may be scrubbed, sliced and eaten raw. In addition to giving the children who do not like the vegetable an opportunity to be a good sport and taste a little as the first step in learning how to eat it, this activity will enable the children to learn something about sanitary rules to be observed in handling and preparing foods. Individual pasteboard picnic spoons may be used for each child to have a taste of the vegetable they have cooked, or if raw carrots are used each child may help himself with clean hands to a slice from the dish.
6. Have children write letters to mothers telling her as interestingly as possible the need and value of vegetables for them.

Vegetable Unit - continued

Correlations:-

1. Arithmetic - Make problems involving the cost of vegetables.
 2. English - Make sentences using the names of vegetables. Write letters to mothers. Write stories about trip to market, preparing and eating vegetables, etc. Conversation lessons.
 3. Art - Posters, booklets, etc.
 4. Spelling - Use names of vegetables for the spelling list.
-

Intermediate Grades

The following unit is based upon one taught by Mrs. Estella McGetchie in the fourth grade of the Public School of Gladstone, Oregon. It was done after the children had completed an imaginary trip around the world in their study of geography and used as a review of that subject as well as a medium for teaching health. It would be possible, and there might be some advantage in them so doing, for the children to write the book while they are taking their travels. The unit as outlined will use the review plan and teachers wishing to use the other plan will have to make some adaptations.

Book Making Unit

Teacher's Aim:-

1. To review travel unit in geography.
2. To stimulate an interest in and encourage the performance of good health habits.
3. To direct children in a cooperative undertaking.

Children's Aim:-

1. To make a Book about the children in the countries they have studied.

Approach: Other children who were not fortunate enough to go on trip with us might enjoy knowing something about the things we did and saw in the countries that we visited. How could we tell them? If children do not suggest writing a book, teacher may say that sometimes people who have taken interesting journeys write books about their experiences. Suggest that instead of each child writing a separate book, the class write one together.

Activities:- Decide on name for book. It is better to let the children compose the title if possible. The Gladstone children chose the title, "Healthy Children".

Examine a book and find out what parts make it up - cover, title page, dedication, preface, introduction, table of contents and chapters. Decide what to do first. Make cover. Children in Gladstone made cover of stiff, green paper, made block letters for the title and used an attractive picture of children playing for the cover design. Children may make their own cover design and illustrations. Holes were punched so that the pages could be tied in.

Book Making Unit - continued

Children, should decide what is to go on title page; what in introduction, chapter headings, etc. The set up of the Gladstone book is as follows: Title page, Healthy Children by the Fourth Grade (done in cut-out block letters); Introduction, telling purpose in writing book and what kind of information will be found in it; dedication; illustration; Table of Contents and the following chapters: Getting Ready; Away We Go; In Pombo's Land; Visiting the Eskimos; The Desert Nomads; the Norwegians; Happy Days in Holland; In Northern France; The Playground of Europe; Homeward Bound: Good Old U. S. A. Each chapter is preceded by a full page illustration consisting of appropriate pictures brought by the children, and the name of the country in cut-out block letters.

The class in Gladstone was divided into groups and each group wrote a different section of the book after the material was reviewed in class and what should go into the book had been discussed. Some of the health items used included things done in preparation for the journey, as the things they put in their suitcases - tooth brush and paste, washcloth, towel, soap, comb and brush and so on; physical examinations so as to be sure to be free from communicable diseases and remedial defects; correction of defects as dental corrections; (children might also learn about immunization to diphtheria, smallpox and typhoid fever before traveling). Points about the health habits in that country were brought out in the chapter on each country, and in the chapter on the United States a list of health rules that we aim to keep was included. Other characteristics of the countries and peoples in addition to the health habits were told.

Each child's work should be directly represented in the book, as it is in the Gladstone book, through writing, composition, illustrating, binding, etc.

When the book is finished a party may be given for parents at which time the book should be displayed, a short simple program presented in which some of the health and other information that the children have learned can be given and simple healthful refreshments served. The Gladstone children combined their Mother's Day celebration and open house entertainment and displayed the book to their mothers at that time.

Integrations:

Geography - Review of countries studied.

Reading - Reading stories about countries.

Arithmetic - Figuring value of foreign money in terms of ours in order to compare cost of things for children of other countries to ours, if such costs are given in any of the stories they have read.

Writing - Writing material to go in book.

Language and Composition - Learning how a book is made. Writing stories to go in book. Conversation about materials, countries, book making, etc.

Spelling - Learning to spell new words used in writing book.

Art and Art Appreciation - Making cover and illustrations for book. Studying copies of pictures by artists of the different countries. Some of these may be included in the book if available.

Integrations - continued:

Health and Character Education - Health consideration in preparation for journey. Health habits of children in other countries - what they eat, opportunities for outdoor exercise, sleeping habits, courtesy, etc. All these points should be brought out when discussed with children what kinds of things to put in stories. When writing chapter on United States bring out fact that we cannot honestly say these things are habits of children in the United States unless we all try to keep them.

Actual health habit performance can be stimulated by allowing only children with clean hands to handle book or material for book; children who come to school with colds do not handle what other children use; emphasis on posture, ventilation, nutrition and other habits which can be observed in school or at the lunch period.

Demonstrations with food models, posters and dialogs and talks illustrating and describing health habits of children in the United States can be given at the Parent's Party. Simple, healthful refreshments such as the children can make may be served the parents and class at the party. For instance; bread, butter and lettuce sandwiches and milk flavored with a little sugar and vanilla.

Milk Unit

Junior High (7th, 8th & 9th grades)

By Supt. C. H. Nosler
Hillsboro Public Schools

Aims:

1. To show proper care and use of milk in the home.
2. To teach the food value of milk.
3. To emphasize the necessity of rigid inspection.
4. To supply methods of detecting dirty milk.
5. To establish reasons for pasteurization of milk and sterilization of containers.
6. To create a desire on the part of the pupils to drink milk.

Approach:

- I. Visit to a certified dairy.
 - A. Discuss arrangement and sanitary conditions of barn.
 - B. Cleanliness of cows, milkers, milking machines, bottling arrangements, etc.
 - C. Pasteurization - reasons, process.

Subject Matter:

- I. Milk contains substances that make it best growth food. These substances furnish the body with -
 - A. Energy.
 - B. Body building material.
 - C. Body regulating material.
- II. Scientists have found that a quart of milk a day is needed for best growth of bones and teeth.

Material:

- I. Rats fed on milk and no milk.
- II. Pictures of rats and other animals with and without milk. Pictures of good and poor teeth.
- III. Calcium carbonate.
- IV. Study for pupils:
 - A. The New Healthy Living by Winslow and Hahn - Book I, Chapters IV and IV; and Book II, Chapter XI.
 - B. Food Facts for Every Day by Winchell - Chapters IV, V, VI.
 - C. Child's Book of the Teeth by Ferguson.
 - D. The Most Nearly Perfect Food by Crumbine and Tobey.
 - E. Path of the Gopatis by Carruthers.
 - F. Milk pamphlet - Metropolitan Life Insurance Company.
 - G. Milk From Farm to Refrigerator - National Dairy Council -
Available from Oregon Tuberculosis Association----- \$.05
 - H. Clean Safe Milk - American Child Health Association -
Available from Oregon Tuberculosis Association----- \$.10
- V. Value of milk as a food.
 - A. Have pupils inform themselves on the value of milk as a food from assigned readings.
 - B. Discuss ingredients of milk.
 1. Calcium carbonate.
 2. Vitamin "A".
 - a. Vitamin "A" in cream and butter.
 - b. Effect of Vitamin "A" on the body.
 - c. Cow gets Vitamin "A" from green leaves. Human beings may do the same.
 - C. Discuss pictures showing lack of milk in diet of animals.
 - D. Consider diets of strong healthy people whom students know. Do they drink milk?
 1. Point out that milk is not a perfect food and it is necessary to eat other good foods as green vegetables, fruits, eggs, etc. to be strong and healthy. However, we cannot ordinarily safely substitute any other food for milk in our diets.
 - E. Draw up reasons why boys and girls of Junior High age should drink milk.
 - F. How best to get a quart of milk in day's diet.

Activities:

- I. Plan a checking system of pupil's own on daily consumption of milk.
- II. Demonstrate home pasteurization.
- III. Prepare a milk cook-book, showing in how many ways milk is used in cooking and serving.
- IV. Make posters, graphs or charts.
- V. Write essays or poems on milk.
- VI. Find out what is meant by tuberculin-tested cows; difference between pasteurized and certified milk.
- VII. Demonstrate odor test for clean milk containers.
- VIII. Observe milk under the microscope.

Correlations:

Geography - 1. Holland, Switzerland, Northwest United States.

Nature Study -

1. Special provision for nourishment of the young.
2. Necessity of "green feed" for cows (Vitamin "A")

Civics -

1. Necessity of clean, healthful milk supply.
2. Who are responsible ?

Correlations - continued:

Arithmetic -

1. Figure dairyman's (estimated) investment.
2. Cost of "overhead".
3. Cost of production, receipts, gain, etc. from each cow.
4. Figure butter fat from per cent test.

(Unlimited number of problems may be given).

Writing, Spelling, Language -

1. Language in both oral and written work. Spelling and writing in all written compositions.

Reading for Teachers:

Steenbock	-	"Milk the Best Food"
Mendenhall	-	"Milk the Indispensable Food For Children"
Philadelphia Child		
Health Society	-	"Food, Teeth and Health"
Crumbine and Tobey	-	"The Most Nearly Perfect Food"

Materials and suggestions for teaching health may be secured from the Oregon Tuberculosis Association, 310 Fitzpatrick Building, Portland, Oregon.

The Child Health magazine published by this Association monthly, during the school year, will be sent free on request to teachers.

STANDARDS FOR CHOOSING MATERIALS

Prepared and Distributed By
Oregon Tuberculosis Association
310 Fitzpatrick Block
Portland, Oregon

One of the essential characteristics of a good health teacher is the ability to choose teaching materials intelligently. There are certain educational and mechanical standards commonly used for judging all teaching materials. These are presumably familiar to all teachers. There are, in addition, special evaluations which should be particularly applied to materials to be used for teaching health. One should ask herself the following questions and any others which seem pertinent when choosing a piece of health educational material.

1. Is it in accord with modern, good educational theory and practice ?
2. Does it meet the mechanical requirements of good materials ? For instance, if printed matter, is the print clear and large enough, the paper unglazed, is it of a size easily handled, is it attractive in composition, are the illustrations good, etc. ?
3. Is it interesting ?
4. Is it appropriate to the intelligence level of the children who are to use it ?
5. If it is a piece of literature, does it have literary merit ?
6. If a textbook, is it well motivated ? If not, how will you provide motivation when you use it ?
7. Is the motivation sound ? That is, is it placed within the subject itself ? Is it likely to function productively in adult life ? Motivation by giving rewards is not sound if judged by these two standards.
8. Does it suggest sound, wholesome, activities which will help the child learn to establish the habits which constitute good health behavior ?
9. Does it provide for the derivation of satisfaction from the right conduct rather than dissatisfaction from the wrong ? In other words is it positive ?
10. Does it respect the child's wish for security by avoiding use of the fear element, a negative procedure ?
11. Will it serve as a constructive element in the unit which I am planning ? Is it best suited for use as motivation, to provide activities, to furnish factual material or for some other purpose ?
12. Is it scientifically sound ? That is, does it give scientific sanction to the right conduct and are all statements accurate ?

"Milk is a perfect food", is a typical untrue statement sometimes found in health materials. "Milk is the most nearly perfect food", is the correct statement. Such mistakes should be guarded against and any statement likely to give a false impression should be avoided. Health fads and opinions of extremists should be shunned. No information should be given to children until you are sure of its scientific accuracy.

13. Is it real ? Since the goal of health teaching is to establish habits, experiences and situations based upon reality should be used rather than phantasies or dreams. The latter may amuse, but do not suggest adventures into which the child can enter vicariously and which he can translate into his own health behavior.
14. Does it contribute equally to sound physical, mental and emotional health ?
15. Be especially critical of advertising materials lest you use something planned chiefly for the purpose of selling a certain commodity. Much advertising material is educationally and scientifically sound; much of it is not.

PLANS FOR WEEK OF OCTOBER 17th

1 - Make a health inventory.

Temperature record chart should be started Monday.
Appoint child, or different child each day to read thermometer and record reading. Primary children will need help from teacher. Use this life situation to teach habits of ventilation during this week.
Miss Morris will come to discuss results of inventory and problems on Monday, October 24th.

2 - Conduct daily morning inspection.

Use mirror for children's self-inspection, if possible.
See October "Child Health" for suggestions concerning morning inspection.

3 - Jot down notes or make skeleton outline of health teaching project, unit or lesson being taught or to be started.

Have ready to discuss with Miss Morris on Monday.

4 - If any teacher wishes help from Miss Morris in introducing a health project or unit, let her know before Monday, October 24th. Be sure to inform her of the nature of the project so she can make plans and bring materials suitable for the project the teacher is carrying on or plans to start.

PLANS FOR WEEK OF OCTOBER 31st

(It may be desirable especially in upper grades to begin some of these activities during this (October 24th week).

Emphasis should be placed upon education concerning the desirability of the periodic physical examination by a physician as the school examinations will take place on November 7th. It is neither possible nor desirable to teach this subject intensively to lower grades, although enough information to gain their interest and cooperation and to allay any fears they may have should be given. Since the lower grade teachers have health lessons or projects including health topics planned, it is recommended that they continue with their plans as the subject of health examinations will probably not occupy the whole health teaching time in these grades.

1. Teachers should read for their own information preparatory to making teaching plans the article "A Bite from the Daily Apple" and "Physician and Teacher" in Health Bulletin for Teachers included (as loans) with materials sent under separate cover. Although the latter article is addressed to high school teachers it is equally suitable for grade school ones. Examine other material sent. If additional copies of any are required, please notify Miss Morris.

2. Nurse will tell you on Monday what to do to get ready for doctor. Find out if work can be facilitated by completing certain preliminary procedures as weighing (if scales available), Snellen eye tests, etc.

3. Suggested Activities -

Primary Grades:

Show children enclosed picture (similar larger one if any available). Discuss what doctor is doing and why. Introduce subject of examinations in our school next week. Discuss simple reasons for examinations and how they are conducted. Children may make up and act simple skit including doctor, patient, nurse, mother, teachers, etc. Stethoscopes may be improvised from rubber tubing or heavy cord and cardboard. Children may

also make small posters or cards containing pictures and simple sentences explaining why a child should have an annual physical examination to take home to parents. Children may suggest sentences themselves after some discussion.

Intermediate Grades:

Introduce in manner similar to primary (see above). Instead of skit, children may put page in health book (take home to show parents). Each child may have picture like enclosed for his book and write his own story about it. It is strongly recommended that the teacher cut out the pictures from the bulletin herself rather than give the children the whole Bulletin, since some ^(only one or two) of the pictures in it suggest ill health rather than good health and it is the positive angle that we wish to emphasize. Some of the pictures (for instance, boy drinking milk) may also be used in the books at appropriate times. If more of these pictures are needed by any of the teachers, Miss Morris will gladly furnish them.

Upper Grades:

Picture on front of October Hygeia might be used as stimulation of interest and lead to discussion. Seventh and eighth grade children may read some of material sent for teachers to secure information for talks or reports. Teacher may distribute and discuss "Go To Your Doctor" folders (more available if desired). Discuss training physician has to have to prepare for work (see "A Bite from the Daily Apple"), therefore an M. D. is a well qualified person to help us to keep well and to get well if sick. Children may prepare short talks to give in other rooms and make posters to place around school for stimulation of interest in health examination on November 7th. Small posters or folders may be made to take home at time teacher sends notice of coming examination to parents.

This topic may be linked up with good health manners and lead to other topics of health protection and disease prevention. Cold prevention is a timely topic which might be taken up the next week. "Little Health Protectors" and

"Hitch Hikers" can be used. More suggestions and materials on this topic will be sent later.

4. The delinascop which Miss Lawrence would like to borrow will be repaired soon and sent out. No doubt all grades would like to use it. Please choose film strips you would especially like to use from list in our Literature Bulletin (list of materials from Oregon Tuberculosis Association) and tell Miss Niemela on Monday, if you have decided, which ones you want.

Notes: Other materials sent which are not for use in this week's topic are to be used when suitable. Other material requested by Miss Lawrence to be sent later. Extra temperature cards are sent so that occasional further check-ups may be made from time to time.

The topics of cold prevention and ~~nutrition~~^{nutrition} are timely and might well be taught now. The facts on the enclosed sheet may be helpful to the teacher in planning lessons.

Suggested activities:

All grades: Organize a "No Colds Campaign". Emphasize rules of hygiene and the importance of staying at home and in bed at the first signs of a cold (this is more important than keeping up attendance records at the expense of personal and the public health) etc.

Primary and intermediate grades: Make posters with positive appeal, use stories, dramatizations by children etc.

Discuss foods for growth and good health. Kinds of things children should eat.

Use story and suggested project, "The Cows That Came Back," in the November Child Health. Discuss foods that pioneers ate. Use paper food models for planning meals that children nowadays eat. Plan good meals for holidays - good things but not too many rich and sweet things. Suggest simple sweets and desserts that can be used instead of the less desirable ones. Make menu or recipe booklets to take home to mothers.

Upper grades: Prepare talks or reports and make posters on cold prevention. Also have class discussions.

Do the same for nutrition.

Further suggestions for all grades may be found in the mimeographed material, "Suggestions for Teaching Health" and "A Suggested Course of Study in Health Education", previously given to you.

Miss Morris will bring some supplementary material in addition to what you already have when she comes to the school for the parents' meeting on Wednesday. Please let her know if there is anything special that you want.

Useful Facts About Colds.

Research in several of our large universities and health institutes has been directed in recent years toward finding the cause of the common cold. The exact cause has not yet been determined - it may be caused by one or several bacteria. One group of investigators believes that it is caused by a filterable virus, a germ so small that it passes through a filter not permeable by ordinary germs. Possibly when the exact nature of the causative organism is found there will be more definite methods for prevention and cure determined. In the meantime, for all practical purposes, it is not important for us to consider what the germ is like, but rather how to prevent its activities.

It is commonly believed that drafts, chilling, wet feet and clothing, or anything that causes the body to lose heat ~~##~~ rapidly or suddenly, and fatigue cause colds. All of these things are no doubt predisposing causes in that they lower the bodily resistance so that the cold germs gain a foothold more easily. Malnutrition is another predisposing cause.

Colds are communicable, they are spread from person to person. It is important for teachers and children to stay at home and in bed when they have a cold. They should begin staying at home as soon as the cold begins, when it is in its most infectious stage. This is not only important for the sick person, as what may seem to be a simple cold may be the beginning of a more serious disease or may become more serious if not properly cared for, but also for other people with whom he may come in contact. It is bad health manners and sometimes criminal to expose others to what is surely an uncomfortable and may be a very serious disease.

The vaccine treatment for cold prevention is sometimes successful but not uniformly so. Its success will probably remain variable until the exact nature of the causative agent is found, when it may be possible for a specific vaccine to be prepared.

Recent work in nutrition has shown that vitamin A increases resistance to infections in nose, throat, ears, sinuses and kidneys. It is a reasonably corrolary that an insufficient amount of this vitamin increases susceptibility to colds. Children, even in the primary grades, where little ^{if any,} of the scientific nature, ~~if any,~~ of foods should be discussed, can be encouraged to use foods rich in this vitamin. Some of our commonest sources of vitamin A are butter, whole milk, cream, egg (yolk), green, leafy vegetables, such as lettuce, spinach and so on, yellow vegetables and cereals, as carrots and yellow corn, and cod liver oil.

The keeping of all habits of healthful living will help prevent colds by building up bodily resistance. The keeping of all habits of personal and public sanitation will help prevent the spread of colds.

Posters on 3rd Grade Geography

- Shelter
1. In what ways might the Indian wigwam be a healthier place in which to live than the large brick house ?
 2. In what ways might the house be better ?
 3. Would you think that the grass thatched houses of Africa would be a clean healthful place to live ? How might they be made so ?
 4. Why can the Eskimos live shut up in their igloos ?
 5. Do birds get plenty of fresh air when they're in their shelters ?
 6. What about rats, moles, gophers, etc. ?
 7. Which are more apt to carry disease ?
- Clothing
1. Clothes that are best for summer, for winter---why ?
(light and warm not too many)
 2. Clothes that give freedom while protecting.
Different climate -- different clothing.
 2. Care of clothing (appearance
(baths
(changes, etc
(shoes
 3. Samples of different kinds of cloth. Testing comparative warmth etc.
 4. Value of good shoes. Need of (rubber) overshoes, galoshes, etc. Never too tight, too short nor large enough to cause blisters by rubbing.
 5. Raincoats--Sweaters, mittens (Not smart to run through puddles or stand under drip. Animals usually know better.
- Heat
Power
Light
1. What should the temperature of a room be ? Can heat be regulated so as to change the temperature ? Should the windows be open while the furnace is going ? Why ?
 2. Why should our homes and schools be well lighted ?
 3. Would you care to study in a smoky, poorly lighted room ?
Can you study well if the room is hot and stuffy ?
 4. (In connection with power) Our bodies are like little dynamos. Shall we tend them well ? Give them the proper fuel, care and protection ? What happens to the engine or dynamo that is neglected, etc. etc. ?
- (Foods that furnish heat and energy.
Indispensable parts of our machine -- Teeth, their care, etc.)

BOOKS FOR TEACHERS - Holbrook School

1. Storm, G. E. - Social Studies in the Primary Grades -
Lyons and Carnahan
2. Wood, Thomas D. - Health Education - a Report of the Joint Committee
on Health Problems in Education (1930 edition) -
American Medical Assn. and National Education
Assn.
3. Wood, T. D. and Hendriksen, E.M. - Ventilation and Health - Appleton and Co.
4. Wood, T. D. and Lerrigo, M. O. - Health Behavior - Public School Publishing Co.

PAMPHLETS FOR TEACHERS -

1. A Bite From The Daily Apple - National Tuberculosis Association
2. Health Bulletin for Teachers - (1930-1931 and 1931-1932 volumes) -
Metropolitan Life Insurance Company
(Article: "Physician and Teacher" in 1931-1932 volume)
3. Hygeia Magazine
4. Suggestions for Teaching Health - Oregon Tuberculosis Association
5. Suggested Course of Study in Health Education - Oregon Tuberculosis Association
6. Outline for Cleanliness Teaching - Cleanliness Institute
7. Teachers' Inventory of Health Assets - National Tuberculosis Assn.
8. Pointers on Health Assets - " " "
9. What Every Teacher Should Know About the
Physical Condition of Her Pupils - Department of the Interior -
Bureau of Education
10. Making the Most of Medican Inspection - National Tuberculosis Assn.
11. Fresh Air in the School Room - Public School Publishing Co.
12. Poster Making in Schools - Metropolitan Life Insurance Co.
14. Child Health Magazine - Oregon Tuberculosis Association

BOOKS, PAMPHLETS AND OTHER MATERIALS FOR CHILDREN AND TEACHERS

1. Schoolroom Temperature Weekly Record Charts - Public School Publishing Co.
(all grades)
2. Little Health Protectors - Oregon Tuberculosis Assn.
(upper grades)
3. Hitch Hikers - Cleanliness Institute (upper grades)
4. Tale of Soap and Water - " " " "

BOOKS, PAMPHLETS AND OTHER MATERIALS FOR CHILDREN AND TEACHERS - Holbrook

5. Judd Jamily - Cleanliness Institute (upper grades)
6. After the Rain - " " (intermediate)
7. The Animal Way - " " (primary grades)
8. Food Models - University of Chicago Press (all Grades)
9. Explorers of the Air - National Dairy Council (intermediate ")
10. Milk Transportation Posters and Stories - Dairymen's League Cooperative Assn.
(intermediate and upper grades)
11. Go To Your Doctor - National Tuberculosis Assn. (upper grades)
12. Rotogravure Bulletin - " " " (all grades)
13. Laennec the Listener - " " " " "
14. Health Heroes - Metropolitan Life Insurance Co.,
(upper grades)
15. Travels of a Rolled Oat - Quaker Oats Company (intermediate grades)
16. Hob O' The Mill - " " " " " "
17. Beye, E. and Bayer, M. - The Wonderful Cow That Really Is -
Dairymen's League Cooperative Assn - (Primary grades)
18. Read. H. S. - Mary and the Policeman - Scribner and Son " "
19. Health and Civics Looseleaf Notebook - Metropolitan Life Insurance Company
(upper grades)

- Also other posters -

Junior and Senior High School Health Education Programs
In the Villages of Baldwin and Freeport, Nassau County,
Long Island, New York*

During the past school year the health coordinator, provided by the Nassau County Committee on Tuberculosis and Public Health to the Baldwin and Freeport schools as a demonstration to those school boards, has been privileged to help the officers and faculty of the junior and senior high schools work out the beginnings of a health program that will fit the needs of these particular high schools.

Until September 1929 there had been no organized health education work in either of these high schools. However, both villages had carried on a health program for two years in the first six grades. This was given as a demonstration by the Nassau County Committee on Tuberculosis and Public Health and in both instances the school boards, in September 1929, took over this work and employed a full time health teaching supervisor for the first six grades. There already existed in these schools an interest in the health work due largely to the enthusiasm of the superintendents of the schools and to the personnel whom the Tuberculosis Committee employed to help in the demonstration.

Both the superintendents and principals of these two schools are educators of a high rank and are interested in giving health education its rightful place in the program of their schools.

TYPE OF COMMUNITY

Each village has a large commuting population in addition to a laboring class, many of whom came from the poor sections of New York City. There are

* The Nassau County Committee on Tuberculosis and Public Health wishes to acknowledge the assistance given it by the Director of Health Education of the Madison Junior High School of Rochester, New York, in working out the program of the Health Councils.

also some families of considerable wealth. The enrollment of the Baldwin Junior-Senior High School is 827. The Freeport Junior-Senior High School has 1011 students.

The health service staff in both schools consists of a full time nurse, a part time medical inspector and a part time Junior Red Cross dentist. The health work this year has centered largely on the junior high school, but the organization which has been set up also includes representatives from the senior high school faculty, looking forward to the extension into the high school of the program initiated in the junior high school.

FACULTY HEALTH COUNCIL

In each school the program is under the direction of a faculty health council assisted by the student council. The council at Baldwin numbers seventeen members and that of Freeport, twenty-two. In addition to representatives from the various departments, members include the librarian, nurse, physician and the chairman of the Parent-Teacher Association, all of whom have added very materially to the success of the program. The principal of the high school acts as chairman of the faculty group. He selected as members of the council, teachers representing the various departments but not only those teachers who were interested in the health program - in fact there were some in these faculty groups who were doubtful about the whole problem. This proved a far sighted choice for while perhaps the work was a bit harder at first there was a decided advantage later in that these lukewarm members became more and more interested and the two faculties were more willing to fall into line with suggestions and recommendations of such committees.

These councils have met once each month during the school year. The health coordinator acts merely as secretary of these councils and works with the various sub-committees. She is at no time chairman of any of the committees.

FUNCTIONS OF THE HEALTH COUNCIL

The functions of the health council are as follows:

- a. To create interest in the school health work by securing active cooperation of the faculty and students.
- b. To centralize the organization and administration of the school health program.
- c. To determine all available resources in the school that could contribute to a well developed health education program.
- d. To coordinate those resources so that they may be used in the most effective manner, thus making it possible for each department to function in a broader way.
- e. To act as a clearing house for all school community health problems.

Sub-committees were formed at various times during the year. These committees were presided over by a member of the health council and other teachers outside the council were included. By this it was hoped to actively interest a greater number of teachers. Another scheme for interesting teachers was a special invitation to at least two non-member teachers to each council meeting, also at the beginning of the year the principal announced that any teacher was privileged to attend the council meeting at any time.

Two sub-committees which have functioned throughout the year are the Correlation (or rather, Integration) Committee, headed in Freeport by the Biology teacher and in Baldwin by the English teacher, and a Homeroom Committee, headed in Freeport by the English teacher, in Baldwin by the Geography teacher. These committees did excellent work. The minutes of the Freeport Health Council of March 1930 will give some idea of their activities:

"The Freeport Health Council met in the Library, March 19th, 1930. In Mr. Mansperger's absence Miss Cochran opened the meeting and presided until his return. The minutes of the previous meeting were read and approved.

"The various committees gave their reports. The chairman of the Homeroom Committee gave a report of the sleep record which was given by the students in three homerooms. Out of 84 students it was found that 38 students, or 45.3%, lost from eight to twelve hours, or one whole night, of sleep each week and 20 students, or 23.8%, lost even more than that - from thirteen to eighteen hours.

"The results of the health knowledge tests which were given by the Health Coordinator have not been totalled for the entire group, but the summary for three classes points out numerous health habits, attitudes and practices that need to be established. Even such simple questions as the amount of water one should drink, placing of the light for reading, prevention of constipation, etc. were missed by many.

"Miss Davis gave a report of a splendid lesson on sleep which she had in her homeroom.

"The Chairman of the committee on correlation reported that one Mathematics class had made some interesting graphs. A bar graph representing the amount of calcium in milk as compared with other foods and two circle graphs - one representing the amount of money to be spent on the different foods, as sugar, meat, milk, etc., when the income is limited, and a similar one when the amount of money need not be considered. The amount of money to be spent for milk remained the same in each case.

"The general plans for the Health Educational work in the cafeteria were given.

"Mr. Fish of the Physical Education Department, gave a most interesting report of the results of the foot print survey.

"The Health Coordinator reported that a summary of the eye examinations given by the doctor and the school nurse show that 110 students or 12% need eye corrections. A committee was appointed to work out the plans for an eye campaign which will give all students knowledge of the right use and care of their eyes and inspire the 12% to have their eye corrections made as soon as possible. The committee, Mr. Gruebel, chairman, Miss Davis and Miss Hack, are to work out the details of this campaign.

"The question of having an examination on the health work was brought up by the chairman. A discussion followed. Mr. Gruebel made a motion that the homeroom teachers fill out a questionnaire which will show what has been accomplished in their own homerooms. Miss Robins seconded this motion. The motion carried. Mr. Mansperger appointed a committee consisting of, Miss Hack, chairman, Miss Lovelass and Miss Robins to work out the questionnaire.

"The meeting adjourned."

STUDENT ORGANIZATION

The student organization came as a result of a suggestion given by one of the teachers at a health council meeting, that the formation of such a student body would aid in developing the best possible health program for the school. This question, however, was referred to the students for their approval. They were extremely interested and gave written suggestions as to name and type of organization. In Baldwin they formed the Baldwin Junior Republic with each homeroom representing some state. The officers are the Governor, Lt. Governor, Secretary of State and Commissioner of Health. In Freeport the homerooms are organized with a President, Vice-President, Secretary and Health Commissioner. The importance of stimulating pupil interest to help carry on the program was evident. After meeting with teachers, either personally or in groups to give them information to be taught on each subject studied, the coordinator met with two pupil representatives of each homeroom.

Subjects of interest to their groups were worked out and they returned to their homeroom to consult with the teacher on plans for the activities thus initiated. These pupil group meetings were most inspirational and the teachers appreciated the added interest which they gave the students.

The students of each homeroom held meetings once a week, the teachers taking little part in the program. The Governor or President presided and parliamentary rules were observed. Talks were given by one, two or three students on the subject being studied throughout the school during the month. These had been prepared under the supervision of the teacher. After the talks, the meetings were thrown open for general discussion.

One very interesting out-growth of these meetings were the lectures given by the pupils to children in the lower grades. These pupil lecturers volunteered this service or were chosen by their teacher. A fifty minute address to lower grade pupils by an eighth grade pupil on an experiment by his biology class in feeding white rats is included in the periodical "New York State Education" for June 1930. Another pupil made talks on "Care of the Eyes." The health coordinator summed up the discussions.

DUTIES OF THE HEALTH COORDINATOR

The particular part of the health coordinator in this machinery has been to act as executive secretary of the faculty committee, work closely with the student committee, give suggestions as to the possibilities of the health program and help coordinate the work in the school as a whole.

METHODS OF HEALTH TEACHING

A combination of two methods of health teaching has been used. First - the health work has been integrated into numerous departments. Following is a quotation from the report of a chairman of one of the integration committees.

"In reviewing the work of correlating health teaching with various subjects, I was especially impressed with the fact that the correlation has been general and natural rather than limited or forced. The extent of the work in correlation is evident when we realize that it has reached into the following departments: science, mathematics, history and civics, Latin, English, writing, and spelling, geography, home economics, and physical education."

Second - regular health lessons have been carried on through the homerooms with the classroom teachers responsible for these lessons. Since the majority of classroom teachers have not had special training in health education the coordinator gives them as much guidance and help as possible.

TIME ALLOTTED TO THE HEALTH PROGRAM

At first, the school officials gave one homeroom period per month for the teacher-student organization to carry on various health activities. At a meeting of a seventh grade group in Freeport the teachers stated that the health work should be given more time in the school program and that one period per month was not enough. The health coordinator believed that this was something to look forward to in another year or two, the teachers persisted however and suggested that a writing period once a week might be devoted to the health work. They took this suggestion to the principal. The superintendent and principal granted their request and one period a week was obtained for the health work.

There was no stated time program for the coordinator's conferences with the teachers. These often took place before or after school or during periods when the teacher was not occupied.

SELECTION OF SUBJECT MATTER

The methods used to select the content of the homeroom lessons and activities were:

1. Pupils gave suggestions as to what they would like to discuss.
2. The faculty at various group meetings made suggested lists.
3. Subjects relating to activities occurring in the health service department. (The subject of the care of the teeth and food for building strong teeth were discussed in the homeroom while the dentist was working at the school.)
4. In some English classes a teacher who was especially interested in health teaching submitted interesting lists from her classes.
5. Health Test. In November the health coordinator gave health knowledge tests composed of fifty questions taken from the Gates-Strang Health Knowledge tests. This test was given to about 500 students representing classes in the seventh and eighth grades (including both extremes of scholastic standing,) biology classes, physics classes and one senior class in typewriting. This health knowledge test served to give information concerning the lack of health knowledge of these groups and in many instances it created keen interest in the individual student. One of the most valuable results of these tests was to show the teacher where her pupils were deficient in health knowledge. From the results of this examination she could plan her health program more intelligently to meet the needs of her group. It also gave her a clearer idea of the scope of the health work.

CASE-WORK OF HEALTH COORDINATOR

In addition to the integration and homeroom lessons the health coordinator helped with individuals who presented problems, particularly in faulty nutrition. These were referred to her by the principals, teachers or nurses. In some cases behavior problems resulting from bad food habits were solved by

repeated conferences with the individual students. They were brought to see the reason for their difficulties and the remedy. In many cases this instruction was carried by the health coordinator into the homes and the parents' aid was enlisted in helping their children. The marked improvement made by individuals who had been a source of anxiety or annoyance to the school authorities was a great factor in winning over to the health program faculty members who had been somewhat lukewarm in their interest.

CONCLUSION

In summing up the programs made by the health councils, the following principles were evolved:

1. Integration of health teaching in various departments.
2. Pupil activities.
3. Pupil-pupil relationship.
4. Widespread faculty participation in both the plans and the teaching.
5. Community contacts.
 - a. Parent-Teacher representative served on health council and talks were given at Parent-Teacher's Association meetings.
 - b. Boy Scouts assisted with Safety Education lessons.
 - c. Lectures by local health specialists.

REFERENCES FOR TEACHERS - Fairview School

Rose, M. S. - Teaching Nutrition to Boys and Girls - Macmillan Co.

Wood and Lerrigo - Health Behavior - Public School Publishing Co.

REFERENCES FOR STUDENTS -

1. Winslow, C.E.A. and Hahn, M. - The New Healthy Living, Books I and II
Merrill Company
2. Williams, J. F. and Dansdill, T. - Health and Control, Sanborn Co.
3. " " " " " " - Health and Service - " "
4. Hygeia Magazine - American Medical Association
5. Clean, Safe Milk - American Child Health Association
6. Milk From Farm to Refrigerator - National Dairy Council
7. Crumbine and Tobey - The Most Nearly Perfect Food -
Williams and Wilkins Co.
8. Milk - Metropolitan Life Insurance Company
9. Milking Time in Many Lands - Dairywomen's League Cooperative Assn.
(posters)
10. Milk Transportation Posters and Booklets - " " " "
11. Three Meals a Day - Metropolitan Life Insurance Company
12. Story of the Banana - United Fruit Company
13. Thrift in Food For Health and Protection - National Tuberculosis Assn.
14. Milk Magazines (no longer published)
15. Food Leaflets - National Dairy Council
16. Food Models - University of Chicago Press
17. Bigelow and Broadhurst - Health for Every Day -
Silver, Burdett and Co.
18. " " " " - Health in Home and Community -
Silver, Burdett and Co.
19. Worthington and Matthews - Our Food - F. A. Owen Publishing Co.
20. Owen, F. C. and Ramsey, E. M. - Nuts and Citrus Fruits -
F. A. Owen Publishing Company

MENUS FOR THE WHOLE FAMILY

Planned by the 6th, 7th and 8th grade nutrition class, Fairview School, Fairview, Oregon
Edited by Miss Henrietta Morris, Health Education Director, Oregon Tuberculosis Assn.

When planning these menus, the class observed the following rules in order to include the foods that are good for growth and health:

1. At least one pint (two glasses) of whole milk a day for each member of the family and a quart (four glasses) for every child if possible. Some of the milk can be combined with other foods, as in soups, custards and so forth.

2. At least two vegetables, either fresh, dried or canned, every day besides potato. One vegetable should be a green leafy vegetable, as cabbage, spinach, broccoli and others.

3. A raw fruit or vegetable every day. Raw or canned tomatoes may be used as a fruit or a vegetable. Most canned foods cannot be used in place of the one raw food; canned tomatoes can be so used because the important vitamin that is in raw foods is not destroyed in canned tomatoes as it is in most other canned foods.

4. Some foods from the cereal grains with each meal. Such foods are: bread, rice, corn, oatmeal, mush and other breakfast cereals. Whole wheat bread, bread made from other whole grains and whole grain ("dark") breakfast cereals contain more factors for health and growth than those made from the refined or white flours and grains. Some of the dark bread or cereals should be used every day. People who cannot afford to use many vegetables, fruits and dairy products should use all whole grain breads and cereals.

5. Either eggs, meat, fish or cheese every day. It is not necessary, especially for children, to eat meat every day. No one should use meat more than once a day. An egg a day is good for children.

6. Use sweets only at the end of a meal or in small amounts with meals to sweeten beverages and cereals, if desired. Never use sweets between meals.

7. Use moderate amounts of fats. Use very few fried foods.

8. Drink from four to eight glasses of water a day. Some water may be taken with meals and some between.

M E N U S

	<u>Breakfast</u>	<u>Lunch or Dinner</u>	<u>Dinner or Supper</u>
1.	Orange Rice Egg Bread and butter *Milk	Pea soup Fish ball Vegetable salad Corn muffin with butter Milk Apple	Baked potato with butter Spinach Whole wheat bread and butter Milk Pear
2.	Stewed apricots Oatmeal with milk and sugar, if desired Toast and butter Cocoa made with milk	Cabbage salad Baked beans Whole wheat bread and butter Milk Orange	Baked sliced ham Baked onions Baked sweet potato with apple Rice pudding with egg and raisins Milk for children Coffee for adults

*Milk in these menus means whole milk. If skimmed milk or buttermilk is used, cream or butter must be eaten to supply the fat soluble vitamins.

	<u>Breakfast</u>	<u>Lunch or Dinner</u>	<u>Dinner or Supper</u>
3.	Orange Cream of wheat with milk and sugar if desired Toast and butter Milk for children Coffee or tea for adults if preferred	Hamburger Baked potato Lettuce salad Bread and butter Bread pudding Milk	Creamed carrots and peas Whole wheat bread and butter Stewed apples with cream Cookies Milk
4.	Tomato juice Mush with milk and sugar if desired Egg Toast and butter Milk	Vegetable salad Whole wheat bread and butter Apple pie Milk or cocoa	Mashed potatoes Carrots or other vegetable as turnips, beets, parsnips, etc. Creamed spinach Bread and butter Canned peaches Milk
5.	Orange Shredded wheat with milk and sugar if desired Toast and butter	Vegetable soup Creamed potatoes Lettuce salad Milk Crackers	Lamb chop or liver Peas and carrots Stewed tomatoes Bread and butter Chocolate pudding Milk
6.	Stewed prunes Scrambled egg Toast and butter Milk	Cream of celery soup Lettuce salad Bread and butter Apple or orange Cup cake	Steak Rice or potato Gravy Green beans Milk Ice cream
7.	$\frac{1}{2}$ canteloupe or other fruit in season Oatmeal with milk and sugar if desired Egg Bread and butter	Halibut, salmon or other fish Corn Jello salad with lettuce Bread and butter Pastry	Potatoes Cabbage or spinach or other green vegetable Cheese Muffins Milk

Suggestions for Sandwich Fillings for the School Lunch

(These suggestions are adapted from The School Lunch, a bulletin published by the Oregon State College Extension Service, Corvallis, Oregon. The bulletin is free and may be had by writing the College).

1. Sliced, hard-cooked egg and salad dressing. Thin slices of crisp, broiled bacon may be added.
2. Minced, hard-cooked egg, diced celery, chopped nuts and cream or salad dressing.
3. Diced boiled liver, chopped onion, boiled rice mixed.
4. Cottage cheese, sliced tomato, small amount of salad dressing.
5. Lettuce, shredded cabbage, raw spinach, water cress if from pure water, diced celery, young leaves of curly kale, chard, dandelions or other greens and salad dressing. Wash all raw foods carefully.
6. Two thirds grated raw carrot, one third ground raisins or other dried fruit, salad dressing.
7. Shredded, raw carrot, a little grated onion or lemon juice, a little salad dressing.
8. Ground dates or prunes and nuts moistened with lemon or orange juice or canned fruit juice.