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Course of Study
in
Health Education



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COURSE OF STUDY

IN

HEALTH EDUCATION

This course of study has been made possible through the efforts and support of the Colorado Tuberculosis Association. Through the financial aid of this organization, the services of Dr. Glenadine Snow of Ypsilanti, Michigan, were obtained for the Summer Quarter of 1926. This course of study was worked out in the College Elementary School under her supervision with the help of members of the Elementary School faculty: Misses Genevieve L. Lyford, Bertha Stephens, Ethel Dulin, Lucy Rosenquist, Floss Ann Turner, Annie McCowen, Elizabeth Luzmoor, Mrs. Susan Van Meter; Helen C. Davis, Principal of the Elementary School, and Dr. W. D. Armentrout, Director of Training Schools.

In working out this course of study, the ideas contained in "Health Education," the report of the Joint Committee of Health Problems in Education of the National Education Association and the American Medical Association have been used as the basis. It is not to be assumed that this outline constitutes the permanent course of study, since it is the result of only a short period of work.

This tentative outline has been organized around those topics or problems which are adapted to the needs, ability, and understanding of the pupils of the different grades of the elementary school. The activities, habits and attitudes, and knowledge which are related to these topics or problems and help to make them more concrete to the pupils are indicated. Not all the problems which will be necessary to cover the subject matter are included in this outline. It is not possible to anticipate specific situations which will arise from time to time in teaching a certain unit of subject matter in a given grade. Problems will be worked out to meet the needs as occasion arises. Furthermore, it is felt that the student teachers in the College Elementary School should have the experience of working out and stating some problems with the pupils. Public school teachers who use this as a guide in health education will find problems peculiar to their own community which must be provided for.

Changes and additions will necessarily be made as the material is used in the classrooms more fully. Blank pages have been inserted after the last page of work for each grade. It is to be hoped that public school teachers who follow this outline will use these pages to indicate specific ways in which the course of study may be made more valuable.

PART I

In this course of study provision has been made for a health examination of each pupil in the school. This is used as a basis for determining what corrective work will be given. All corrective work is done under the supervision of a member of the physical education department who is trained for that work. The active work or physical exercise is a definite part of the daily program in each grade. The actual plays, games, and exercises used will be those as given in the bulletins, "Health Education," supplemented by the teacher's own supply.

Limited time has prevented the emphasis of all aspects of health. Until further work can be done with the cooperation of the psychology department, the following taken from "Health Education," pp. 23, 24, 62-64, is given as suggestive helps to the teachers:

"Health education can be promoted only by emphasizing all aspects of health, physical, mental, social, and moral. The ideal of health is the realization of the highest physical, mental, and spiritual possibilities of the individual.

**"The Healthy Personality: Mental, Emotional, Moral
and Social Health**

"To picture the healthy mental, emotional, moral, and social qualities of the child is to describe the healthy personality. In describing the characteristics of a healthy personality, it is desirable to allow for a variety and range of individual differences. To be well balanced it is not necessary to suppress one's individual qualities, or to conform to a uniform pattern. It is, nevertheless, useful, keeping this in mind, to describe the simplest and most significant evidences of a healthy personality. They are as follows:

"1. The child possesses intelligence adequate to meet the demands of his life. This includes the whole range of intelligence from very superior to somewhat below the average. Some very healthy personalities are found among those, whose intelligence is inferior to the average, but is, nevertheless, sufficient to meet the demands of their simple lives of manual work.

"2. He is able to concentrate his attention upon the matter before him, and to perceive the important elements of the situation with accuracy and alertness.

"3. He is interested in the world about him, and curious to understand it.

"4. He is generally self-confident; he expects success and achieves it with reasonable frequency.

"5. He is active in overcoming difficulties; he does not 'day dream' so much that he fails to meet the actual situation.

"6. His predominating emotional qualities are happiness, cheerfulness, courageousness. He is not troubled by unnecessary fears, shyness, or timidity. His emotional responses are those that are appropriate and useful for the occasion.

"7. He does not ordinarily brood or sulk, or indulge in morbid introspection.

"8. He has many objective interests; friends, hobbies, games in which he finds adequate self-expression.

"9. He is companionable and mingles easily with other children. He adapts himself easily to cooperative enterprises; to leadership or followership.

"10. The child's relationships with children of the opposite sex are wholesome.

"11. He has a sense of responsibility for the happiness and well-being of his friends, schoolmates, and members of his family.

"There are important applications of mental hygiene which should be made to the school. It would be desirable to have a complete examination of every school child upon entrance into the school, this examination to include the child's mental as well as his physical health. This is a goal that is far from being realized, but there are still many things which teachers can do. A few suggestions are given:

"1. Teachers should help their pupils to acquire emotional control, and should avoid any course or action which will arouse undesirable emotions. Children should never be frightened; a childhood fright may become the basis of an adult psychosis. Children should not be ridiculed, shamed, or embarrassed; a child's fear of ridicule may be so intense as to paralyze effort. There should be a calm orderly atmosphere in the school room which avoids both undue restraint and emotional excitement.

"2. Help the shy, easily embarrassed child to overcome his bashfulness and emotional disturbance, so that he may carry on his work and play with other people more happily and efficiently.

"3. Teachers should help their pupils to establish habits of intellectual honesty; to meet problems squarely and not to dodge the issue.

"4. The habit of concentrating on the present task is one which should be encouraged. Teachers should help their pupils to learn how to work successfully and efficiently. A certain amount of physical and mental work is healthful. Much unhappiness and mental distress come both to children and adults, from inability to work successfully.

"Children should not be lied to concerning important matters, especially about the matter of sex. The lying and deceit are soon discovered, and the experience is exceedingly bad for the child. Much of the unhappiness, worry, and failure at school, and the nervous illnesses of young adolescents, as well as the nervous and mental breakdowns of later life, are due to the misunderstanding of these matters that has been brought about by the lying and deceit of others. It is of very great importance that this be avoided. The questions of a child along these lines should be answered honestly and without embarrassment, in accordance with the ability of the child to understand."—(Mental Hygiene and Childhood, Frankwood E. Williams.)

"5. Children should be encouraged to find a real solution to each problem that faces them, to meet their problems by activity instead of day-dreaming. The day-dreaming is not harmful if it issues in activity, but excessive day-dreaming which leads nowhere is undesirable.

"6. The teacher should make every effort to keep the children from developing a feeling of inferiority. Each child should have a chance to succeed at something; constant failure establishes the habit of failing, and an almost insurmountable obstacle of discouragement or indifference. Teachers should adjudge success upon the basis of effort.

"7. Encourage activities which inherently emphasize the desirable qualities, e.g., cooperative sports, school papers, student government, civic activities, hobbies, development of special talents and abilities, scouting activities.

"8. Encourage socially useful activities, and the development of interest in other people's welfare.

"9. The adolescent age is characterized by a combination of emotional instability and increasing independence which often results in what appears to be perfectly unreasonable behavior. It is worth the teacher's while to attempt to understand all such occasions, and herself to be not only reasonable, but intelligently constructive in dealing with her pupils at such times.

"To sum up, habits of truthfulness and honesty, cheerfulness, unselfishness, helpfulness, sociability, courage, persistence, and resourcefulness should be among those most emphasized.

"Applied to health education activities, these mean that:

"1. Selection of subject matter should emphasize the wholesome, objective aspects of health rather than the introspective, pathological or morbid.

"2. Activities should be conducted so as to obtain the most desirable by-products in attitudes and emotional habits. 'Whole-hearted, purposeful activity carried out in a social environment,' i. e., the 'project method,' promises to be one of the most healthful ways of carrying on school activities.

"3. A part of every teacher's preparation should be such study of child psychology and physiology as will help her to understand her pupils.

"The child's early years should be devoted primarily to establishing health habits, learning simple rules and developing an attitude of self control and a feeling of responsibility for his own health conduct."

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COLORADO STATE TEACHERS COLLEGE

Suggestions—

Suggestions—

PART II

KINDERGARTEN, GRADES I, II, III

Individual Health Problems:

In the early primary grades, daily inspection shows the progress of the children in establishing habits of cleanliness.

In these grades, no definite time is set aside for health education instruction. The aim is to make health habits and attitudes the outcome of every activity. The knowledge acquired is used as a basis of reading and language lessons. The children are weighed each month and the figures obtained used for simple problems in arithmetic.

I. Personal Cleanliness

A. Hands

1. Activities

a. Inspection of hands

Demonstration of best way for washing hands clean and for cleaning nails.

One child with soiled hands washes in cold water and soap, then wipes hands. Another washes in cold water and soap, then wipes hands. A third washes hands in warm water and soap, then wipes hands on towel. Children examine hands and towel.

b. Inspect hands before handling books or paper. Each child inspects his own hands and washes them if soiled because he wishes to keep his books clean.

c. Time given for washing hands before lunch and after recess.

d. Fold paper and make a nail cleaner.

e. Demonstration—use of nail file.

2. Habits and Attitudes

a. Washes hands before eating.

b. Washes hands before handling food.

c. Washes hands before handling clean material.

d. Washes hands before going to bed.

e. Washes hands after eating.

f. Washes hands after the toilet.

3. Knowledge

a. Clean hands keep toys, books, and papers clean.

b. Clean hands keep food clean.

c. Other people enjoy seeing clean hands.

d. Hands should be washed with warm water and soap.

e. Hands after washing should be thoroughly dried.

f. Nails should be kept clean and short.

g. Biting nails spoils the shape of fingers.

B. Care of Skin

1. Activities

a. Watch birds bathe.

2. Habits and Attitudes

a. Take a cleansing bath at least twice a week.

b. Use only individual towels and wash cloths.

c. Face, neck, and ears are washed every day.

3. Knowledge

a. A warm bath makes the skin clean.

b. The skin must be clean to be healthy.

c. Other people enjoy seeing clean faces, neck and ears.

d. The air in the room is pleasanter when bodies are clean.

C. Mouth and Teeth

1. Activities
 - a. Each child examines his own teeth in a mirror to find out whether they are clean and sound.
 - b. Demonstration—how to brush teeth. Tooth brush drill using finger or wooden tongue depressor.
2. Habits and Attitudes
 - a. Brushes teeth at least twice a day.
 - b. Each child has his own tooth brush.
 - c. Puts only proper things in his mouth.
3. Knowledge
 - a. Tooth brush should be put in the sun every day.
 - b. Teeth need good food like milk, leafy vegetables, and fruits.

D. Care of Nose

1. Activities
 - a. Learns to blow nose gently without closing nostrils.
 - b. Learns how to cover a cough and sneeze.
2. Habits and Attitudes
 - a. Breathes with mouth closed.
 - b. Uses only his own handkerchief.
 - c. Brings to school a clean handkerchief each day.
3. Knowledge
 - a. It is polite to cover a cough and sneeze.

E. Clothing

1. Activities
 - a. Learns how to dress himself.
 - b. Puts on and takes off rubbers.
 - c. Learns how to hang wraps on his own hook.
2. Habits and Attitudes
 - a. Hangs up his wraps on his own hook.
 - b. Is independent in caring for his own clothing at school.
3. Knowledge
 - a. Wraps and rubbers should be worn outdoors and removed when inside.
 - b. All clothing should be kept clean.
 - c. Clothes should be kept fastened.
 - d. Wet clothing should be changed or dried immediately.
 - e. Clothing should be aired at night.

II. Food

1. Activities
 - a. Cut out and make a paper drinking cup.
 - b. Play store
 - (1) Buy food for a good breakfast.
 - (2) Buy food for a school lunch.
 - c. Play cafeteria
 - (1) Choose a good lunch.
 - d. Learns how to swat flies.
2. Habits and Attitudes
 - a. Drinks four cups of milk daily.
 - b. Eats whole cereal every day.
 - c. Eats two vegetables besides potatoes daily.
 - d. Eats fruit every day.
 - e. Eats slowly—chewing food well.
 - f. Drinks four to six glasses of water daily.

3. Knowledge

- a. Milk and cereals help children to grow.
- b. Milk, bread, butter, and vegetables help children work and play and keep them warm.
- c. Drinking plenty of water helps to keep children well.
- d. Food that has been on the floor or partially eaten should be thrown in the waste basket.
- e. Table silver that has been in your mouth should be put only in your own food.
- f. Eats only good food that has been kept free from flies and dust.

III. Sleep and Relaxation

1. Activities

- a. Watch how and when baby brother or sister sleeps.
- b. Watch pets at home—birds, cats, kittens, dogs.
(1) Do little kittens and puppies sleep more than cats and dogs?
- c. Learns how to rest
Children lie on floor, tables, or chairs stretching out arms and legs and relax for five or ten minutes every day. Children are not required to close their eyes.

2. Habits and Attitudes

- a. Sleeps eleven hours every night.
- b. Has a regular bed-time.
- c. Sleeps with windows open.
- d. Sleeps in a quiet place.
- e. Does not want a light in the room where he sleeps.

3. Knowledge

- a. Sleep helps young animals and children to grow.
- b. Children rest better when they sleep with windows open.
- c. Babies and children need more sleep than grown-ups.

IV. Safety First

1. Activities

- a. Dramatization of safety first activities.
- b. Pupils act as traffic cops about school buildings and yard and hall.
- c. Making of "Safety First" posters.
- d. Keeping to the right in halls and on stairways.
- e. Taking one's turn at fountain, play, etc.
- f. Handling sharp instruments carefully, as scissors, knives, etc.
- g. Picking up all articles over which one might stumble.
- h. Hurting no one's person or clothing in play intentionally.

2. Habits and Attitudes

- a. Keeps to the right on passageways and on highways.
- b. Looks to the left until in the middle of the street, then to the right the rest of the way.
- c. Crosses the street directly, not at right angles.
- d. Is careful in crossing car tracks.
- e. Obeys traffic laws and signals.
- f. Looks on policemen and traffic officers as friends and public servants.
- g. Awaits one's turn at ticket-windows, fountains, etc.
- h. Helps very young, very old, crippled, and blind persons when possible.
- i. Does not disturb others by loitering along streets or passageways.
- j. Does not lean too far out of windows or other openings.
- k. Does not climb about unfinished buildings.
- l. Does not hang onto vehicles or enter or leave them while in motion.

- m. Avoids getting too close to blazes, especially at a time of festivity as at Christmas and during play around a bonfire.
 - n. Picks up articles from floor or street.
 - o. Walks carefully on slippery surfaces and helps others to do so when possible.
 - p. Handles all sharp instruments, as scissors and knives, carefully.
 - q. Does not injure another person's clothing or property in play.
 - r. Knows streets, blocks, and general directions, especially those near school and home.
 - s. Avoids playing with matches, strange substances, and loose or fallen wires.
3. Knowledge
- a. Pedestrians should keep to the right in passageways and on highways.
 - b. People should look to the left until in the middle of the street, then to the right the rest of the way.
 - c. One should cross the street directly, not at right angles.
 - d. One should be careful in crossing car tracks.
 - e. One should obey traffic signals and laws.
 - f. Policemen and traffic officers are friends to the public and public servants.
 - g. One should await one's turn at ticket windows, fountains, and other public places where it is the custom to do so.
 - h. One should help very young, very old, crippled, and blind people when possible.
 - i. Loitering along streets and passageways is disturbing to others.
 - j. Leaning too far out of windows and other openings is dangerous for self and others.
 - k. To climb about unfinished buildings is unsafe and is trespassing on other's property.
 - l. Hanging onto vehicles or entering or leaving them while in motion is dangerous.
 - m. All blazes are dangerous especially at a time of festivity or play, as at Christmas or around a bonfire.
 - n. Articles should be picked up from floor or street as they may cause someone to stumble.
 - o. One should walk carefully on slippery surfaces and warn others of such danger when possible.
 - p. Sharp instruments like scissors and knives, are very dangerous if handled carelessly.
 - q. Play or pranks should not involve injury to another person's property or clothing.
 - r. To know streets, blocks, and general directions is helpful to self and others.
 - s. Playing with matches, unknown substances, and fallen wires may be most dangerous.

V. Play Activities

1. Activities

- a. Plays out of doors daily.
- b. Enters into the spirit of the game.
- c. Is helpful in the game.
- d. Dresses suitably for outdoor play.
- e. Plays fair.
- f. Plays happily with others.
- g. Takes turn at selecting game.
- h. Thinks and acts quickly in response to music.
- i. Plays carefully in all indoor games.

2. Habits and Attitudes
 - a. Selects material with which he wishes to play.
 - b. Plays with the material which he selects.
 - c. Puts away the material when finished.
 - d. Waits his turn patiently.
 - e. Is congenial in the group.
 - f. Helps in group play.
 - g. Enjoys play.
3. Knowledge
 - a. Children should play out of doors rather than indoors whenever possible.
 - b. Outdoor play helps to make one strong and well.
 - c. Children should be dressed suitably when playing out of doors (not too many wraps).
 - d. Play helps children to grow.
 - e. Lights, windows, and furniture are often broken by careless indoor play.

VI. Courtesy

1. Activities
 - a. Practices habits of courtesy in school situations.
 - b. Does things to make others happy.
 - c. Helps to settle their own quarrels.
 - d. Takes responsibility of caring for younger or weaker child on playground or on way home.
 - e. Takes responsibility for finding owner of an article found on playground or street or gives it to a person in charge of lost articles.
 - f. Shares possessions with friends.
2. Habits and Attitudes
 - a. Boys remove caps and hats in the house.
 - b. Wiping shoes or rubbers before coming into house on wet days.
 - c. Picking up objects dropped by other people for them when it is helpful to them.
 - d. Looking out for smaller children at home or at school.
 - e. Keeping feet off other's chairs.
 - f. Saying "thank you" when something is done for one.
 - g. Offering a chair to an older person or visitor.
 - h. Looking at others when speaking or being spoken to.
 - i. Not speaking when others are speaking.
 - j. Saying "Excuse me," or "Please pardon me," when passing in front of others, when a wrong has been done accidentally, and when interfering with others unintentionally.
3. Knowledge
 - a. Knows under what conditions, courtesy requires one to ask to be excused.
 - b. Knows how to excuse oneself when courtesy requires it.
 - c. Knows that boys should remove hats or caps in the house.
 - d. Knows when to say "thank you."
 - e. Knows that it is courteous to offer a chair to an older person or visitor.
 - f. Knows that other people and their things should be let alone.
 - g. Knows what to do with lost articles.

ILLUSTRATION OF PROBLEM DEVELOPMENT

Candy Problem

SECOND GRADE

This grade kept a candy chart for one week, recording on chart each day the candy each child in the grade ate. The chart also showed the kind and amount of candy, time eaten, and cost.

At the end of the study the children dramatized what they had learned about candy.

Posters were made showing

- (1) When to eat candy
- (2) How much candy to eat
- (3) What kind of candy to eat
 - (a) Wrapped candy
 - (b) Pure candy
 - (c) Small pieces
 - (d) Candies that grow—raisins, prunes, figs, dates.

The cost of candy eaten by grade one week was estimated and a poster was made showing what attractive toys could have been bought if the money had been put in the bank and spent that way.

Dramatization

One Scene

Stage: Representation of a candy store. The candy is exposed to the dirt and flies; the floor is littered with papers and the clerk is dirty, with soiled clothes and ruffled hair.

Situation 1.

Two children enter. One child notices a piece of candy on the walk (supposedly in front of the store) and is going to pick it up and eat it. The other child stops him, and, after telling him that the candy has been lying on the dirty sidewalk, that ants may have walked over it, convinces him that the candy is not fit to eat and he throws it down again. They start on, then the child who threw the candy away decides not to leave the candy there for someone else to eat who might not know that it was dirty, and throws it to one side, away from the walk.

These same two children enter the store intending to buy some candy, but the store is so dirty and the candy does not look clean so they decide to go on down the street to buy their candy.

Situation 2.

Some more children come to the store to buy candy. They meet a little girl playing along the street and ask her to go along, but she refuses because she is saving her money to buy her mother a birthday present. They discuss saving money instead of spending it for candy. The little girl goes on down the street and the other children go on to buy their candy. One child speaks of the flies, another of his handling the candy with his hands, and they decide that they, too, will go on down the street to buy their candy.

Situation 3.

The clerk is worried because they will not buy his candy. He looks around his store and decides that it is pretty dirty and unattractive. He decides to clean it up, so puts a sign "Help wanted," in the window. Soon a little girl comes along and applies for the job. He hires her and tells her what to do. She cleans up the store, sweeping, dusting, swatting flies while he goes outside and cleans himself up. When he comes back on the stage he wears a white cap and apron, and is carrying some new glass candy cases, and clean wrapped candy. They arrange the store neatly, he pays his helper and she leaves.

Situation 4.

A group of children enter. The clerk is polite. The children think his store is clean, the candy looks good, and they buy from him. One girl buys raisins because they are good as they grow on trees. Another child buys a sack of candy and offers another a piece with his hands which he refuses and asks to be allowed to take one out of the sack himself. This he does not eat. On being asked why, he says that it spoils his dinner to eat candy before dinner. The other child decides to keep his candy until after dinner, also, as he remembers having his dinner spoiled by eating before meal time.

The storekeeper decides that it pays to keep one's store clean so that people will buy his candy.

Suggestions—

Suggestions—

PART III**GRADES IV, V, VI****Group Health Problems**

In these grades, personal health habits are still emphasized. Health habits surveys are made during the year. The outlines for earlier grades are reviewed to meet any need found by surveys. The pupils are weighed each month; these weights are then used to help teach them the relationship between health habits and satisfactory weight. The work in the early part of the fourth grade provides the means of giving the child a broader viewpoint and of turning his attention from his own personal health problems to those of the group. More technical information is given in response to the child's felt need for knowing "why" but should not confuse him by details he cannot understand. Definite time is set aside in the daily program for health instruction. However, a definite connection and tying up of the study of health, hygiene, and geography is made throughout the intermediate grades. The child is made to feel that what he has learned in the period set aside for health instruction should carry over into all his activities.

A health habit scale forms one means of calling the attention of the pupils to their practices in health and safety habits. Only those habits are considered that can be checked at school by the pupils under the supervision of their teacher.

Health Habit Scale

1. Is clean and neat in appearance.
 - a. Keeps his body clean.
 - b. Has clean, well-brushed hair.
 - c. Has clean teeth.
 - d. Keeps his finger nails short and clean.
 - e. Wears clean, neat clothing.
2. Helps keep the school clean.
3. Helps take care of school property.
4. Tries to sit and stand properly.
5. Cooperates in all play.
 - a. Enjoys play.
 - b. Plays fair.
 - c. Responds to signals.
 - d. Is a good loser and a good winner.
6. Takes proper care of eyes, nose, and mouth.
 - a. Reads only in good light.
 - b. Holds his book in correct position.
 - c. Uses only his own clean handkerchief.
 - d. Covers cough and sneeze with clean handkerchief.
 - e. Puts only proper things in his mouth.
7. Tries to protect himself and others from colds.
 - a. Avoids getting near people with colds.
 - b. Stays at home when he has a cold.
 - c. Uses good judgment in wearing wraps, rubbers, etc.
 - d. Exposes himself as little as possible to wet and cold.
8. Is considerate of other people.
 - a. Is courteous.
 - b. Is cheerful.
 - c. Is truthful.
 - d. Is punctual.
9. Observes safety first rules.

FOURTH GRADE

I. Nutrition

1. Problems

- a. How can I keep up to standard weight?
- b. What is standard weight?
- c. What foods do I need to help keep my weight standard?

2. Activities

- a. Children are weighed every month and measured at beginning and end of year.
- b. Analyze lunches
 - (1) To classify foods.
 - (2) For vitamins.
- c. Make balanced lunch menus
 - (1) Home.
 - (2) School.
- d. Make posters.
 - (1) Food friends.
 - (2) Balanced meals.

3. Habits and Attitudes

- a. Eats only at regular meals.
- b. Eats meals that are well-balanced; chooses his food wisely.
- c. Eats the amount of food needed at regular meals.
- d. Has self-control to refuse foods that are not good for him.
- e. Drinks four to six glasses of water daily.
- f. Drinks at least one pint of milk daily.
- g. Drinks no tea or coffee.
- h. Thinks of cheerful things while he eats.

4. Knowledge

- a. Certain foods build the body by supplying different materials to the body.

(1) Proteins—build and repair

(a) Foods which contain protein

milk	meat	peas
cheese	fish	beans
eggs	nuts	cereals

(2) Carbohydrates—supply heat and energy

(a) Foods which contain carbohydrates

milk	cereals	hominy
bread	crackers	macaroni
potatoes	honey	syrup
cornmeal	rice	cornstarch
tapioca	sago	molasses
jellies	fruits	sugar

(3) Fats—supply heat and energy

(a) Foods which contain fat

milk	fat meats
butter	peanut butter
cheese	nuts

(4) Minerals—build bones and teeth

(a) Foods which contain minerals

milk	fruit
vegetables	eggs

- b. Certain foods build the body by keeping it in running order.
 - (1) Vitamines
 - (a) Foods which contain vitamines
 - milk
 - fruit—lemons, oranges, grapefruit, tomatoes, apples.
 - vegetables—green leafy vegetables
 - cod liver oil
 - eggs
 - (2) Bulky foods are body cleansers
 - whole wheat bread
 - whole cereals
 - vegetables
 - (3) Hard foods exercise the teeth
 - hard breads, zwieback, toast
- c. Certain food habits help build the body and make us grow
 - (1) Regular meals
 - (2) Well-balanced meals
 - (3) Drink
 - plenty of water
 - plenty of milk
 - no tea or coffee

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II. Bacteria

1. Problems
 - a. How do bacteria or germs affect my growth?
 - b. What habits should I form to avoid them?
2. Activities
 - a. Visit bakery. Note:
 - (1) Wrapped bread
 - (2) Food in cases
 - b. Visit groceries. Note:
 - (1) Candy Displays
 - (a) Wrapped Candy
 - (b) Candy in cases
 - (c) Candy not protected
 - (2) Food put up in sanitary packages
 - (3) Groceries in bulk in covered receptacles
 - c. Put sound apple touching rotten one to show how the bacteria affect the sound one.
3. Habits and Attitudes
 - a. Washes hands before every meal.
 - b. Keeps his mouth clean
 - (1) By brushing teeth.
 - (2) By keeping fingers and other objects out of mouth.

- c. Refuses to drink from cup or glass which has been used by someone else.
 - d. Never puts bread wrappers in the bread box.
 - e. When selecting food at a cafeteria, does not talk across the food.
 - f. Scalds thoroly all dishes before wiping them.
 - g. Refuses to take soft drinks or ice cream at a confectionery which does not scald its dishes.
4. Knowledge
- a. Bacteria or germs are tiny invisible plants that are found everywhere.
 - (1) Out of every 100 bacteria, 95 are good and helpful and only five are bad.
 - (2) Bacteria help make butter and cheese and give it a good taste.
 - (3) Bacteria help make the soil fertile so trees and plants will grow.
 - (4) Bacteria help make vinegar.
 - (5) Some germs are mischievous and turn milk sour, etc.
 - (6) A few bacteria are bad and make people sick.

References :

- O'Shea and Kellogg, **Keeping the Body in Health**, pp. 248-252
 Chambers, Mary D., **Nature Secrets**, pp. 20-23, pp. 61-69, pp. 133-142

III. Clothing

1. Problems

- a. What clothing should I wear in order to keep well?
- b. How should I take care of my clothing so that I may be well and appear well-dressed?

2. Activities

- a. Observes the covering of animals, hair, wool, feathers, etc. Difference in summer and in winter.
- b. Finds out whether his shoes fit his feet.
 - (1) Child stands on a piece of paper and with red pencil draws an outline of his bare foot. Placing the heel of his shoe on the heel of his outline, he draws with a black pencil the outline of his shoe. Examines the two outlines.
- c. Exhibit of right kind of shoes for children.
- d. Exhibit of proper clothing.
- e. Inspection of clothing—for neatness, cleanliness, etc.
- f. Sews on missing buttons.
- g. Shines shoes.

3. Habits and Attitudes

- a. Assumes responsibility for wearing wraps and rubbers outdoors when needed.
- b. Assumes responsibility for removing wraps and rubbers indoors.
- c. Knows when shoes fit the feet and is unwilling to accept any others.
- d. Takes pride in keeping clothing clean and mended.

4. Knowledge

- a. Proper clothing helps the body keep right temperature.
 - (1) Dress very lightly in warm weather.
 - (2) Dress lightly indoors in cold weather.
- b. Clothing should be loose
 - (1) Garters
 - (2) Waist band
 - (3) Collars

- c. Clothing should be well cared for
 - (1) Day clothing should be hung up to air at night.
 - (2) Buttons should be kept sewed on.
 - (3) Shoes should be mended.
 - (4) Stockings should be aired every night.
 - (5) Stockings should be kept clean.
- d. Shoes should fit the feet
 - (1) Good shoes have low heels, broad toes, and straight inner line.

References :

- O'Shea and Kellogg, **Building Health Habits**, pp. 190-193
- Andress and Evans, **Health and Success**, pp. 169-176
- Bigelow and Broadhurst, **Health for Every Day**, pp. 131-144
- Andress and Evans, **Health and Good Citizenship**, pp. 50-58

IV. Shelter

- 1. Problems
 - a. In what kind of a home should I live in order to keep well?
 - b. What habits should I form in regard to heat, ventilation, and light in the home?
- 2. Activities
 - a. Draw plan of lot showing location of house, trees, and other buildings.
 - b. Draw plan of block in which your house stands.
 - c. Draw plan of sleeping room—showing location of bed and windows.
 - d. Show effect of light on sprouting potato.
 - e. Observe what styles of windows are used in the houses on your way to school.
 - f. Keep a thermometer chart of the living room for one week.
- 3. Habits and Attitudes
 - a. Watches temperature of room at home to see if it is not above 68°.
 - b. Sleeps with windows open.
 - c. Avoids drafts.
 - d. Sits with light coming over left shoulder.
 - e. Insists upon having good light on his books or work.
- 4. Knowledge
 - a. Healthful homes help to keep us well.
 - (1) Houses should be located so as to have plenty of sun and air.
 - (2) Houses should have plenty of windows.
 - (a) Every room should have an outside window.
 - (b) Electric light is the best artificial light. Why?
 - (3) Air in rooms should be fresh and odorless.
 - (4) The temperature of rooms should be between 68° and 70°.

References :

- Andress and Evans, **Health and Success**, pp. 110-11
- Health and Good Citizenship**, Chap. XIII
- Bigelow and Broadhurst, **Health in Home and Neighborhood**, Chap. III, Chap. IV, Chap. V
- Dresslar, **School Hygiene**, pp. 140-149, 164
- O'Shea and Kellogg, **Building Health Habits**, Chap. XII

FIFTH GRADE

I. Colds

1. Problems

- a. How can we prevent colds in our room and school?
- b. Why do we wish to prevent colds? What harm are they to us?
- c. What causes colds?
- d. What should we do when we have a cold?
- e. How can we prevent the spread of colds in our room?

2. Activities

- a. Determine the number of children in room who have colds.
- b. Keep record of number of absences due to colds.

3. Habits and Attitudes

- a. Proper use of handkerchief when sneezing and coughing during a cold.
- b. Habit of keeping away from people during a cold.
- c. Habit of not using a drinking cup, towel, or handkerchief that is to be used by others.

4. Knowledge

a. Colds

- (1) Are unpleasant to ourselves and other people.
- (2) Make us feel ill.
- (3) Make us susceptible to disease—tuberculosis, influenza, sinus infections, and catarrh.
- (4) May cause others to have colds.

- b. Colds are caused by germs or bacteria. These are spread by careless people who have colds.

c. Colds may be cured by

- (1) Staying home from school. Keeping away from others.
- (2) Eating lightly.
- (3) Drinking a glass of water every hour.
- (4) Taking a mild laxative.
- (5) Keeping quiet.

References:

Andress and Evans, **Health and Good Citizenship**, pp. 229-235.

II. Nose, Throat, and Ear

1. Problems

- a. What is the proper way to take care of the nose, throat, and ear?
- b. What is the structure of the air passages of the nose?
- c. What are the common causes of trouble in these organs?

2. Activities

- a. Laboratory study of models showing structure of these organs.
- b. Make a list of simple statements telling how to keep nose, throat, and ears in good condition.

3. Habits and Attitudes

- a. Proper habits in taking care of nose, throat, and ears.
- b. Habit of reporting promptly to nurse about sore throat or earache.

4. Knowledge

- a. The path the air takes to the lungs.
- b. The use of lining of the air passages.

- c. Openings from air passages to ears and other parts of the body.
- d. Dangerous results of
 - (1) Neglected colds.
 - (2) Obstructions not removed promptly from nose.
 - (3) Breathing dusty or smoky air.
 - (4) Breathing air which is too dry or hot.
 - (5) Diseased tonsils.

Reference :

Andress and Evans, **Health and Good Citizenship**, pp. 156-169

III. Eyes

- 1. Problems
 - a. What is the proper way to care for our eyes?
 - b. What is the structure of our eyes?
 - c. How do our eyes tell us that they need care?
 - d. What are the common causes of eye trouble?
- 2. Activities
 - a. Determine the number of pupils in the room who wear glasses.
 - b. Determine the number of pupils in the room whose eyesight was reported as satisfactory in the health examination.
 - c. List causes of eye trouble among pupils in room.
- 3. Habits and Attitudes
 - a. Holding reading matter at proper distance.
 - b. Sitting when reading with light coming from left.
 - c. Resting the eyes at intervals when reading, writing, or sewing.
- 4. Knowledge
 - a. The protective coverings of the eye.
 - b. The structure of the eye.
 - c. Indications of eye strain such as squinting, frowning, headaches, inflamed eyes, blurring of eyes when reading.
 - d. Causes of eye trouble are
 - (1) Reading or doing careful work in a poor light or in dust and smoke.
 - (2) Infecting eyes by rubbing, putting hands or soiled handkerchiefs in them.
 - (3) Facing a strong light.
 - (4) Not consulting an oculist as soon as eyes hurt.

Reference :

Andress and Evans, **Health and Good Citizenship**, pp. 156-169

IV. Teeth

- 1. Problems
 - a. How should we care for the teeth?
 - b. What is the structure of our teeth?
 - c. How many teeth should we have?
 - d. What are the common causes of trouble with our teeth?
 - e. What causes unhealthy gums?
- 2. Activities
 - a. Prepare posters showing good and bad ways of taking care of teeth.
 - b. Prepare a mouth wash suitable for use in cleaning teeth.
- 3. Habits and Attitudes
 - a. Brushing teeth regularly after meals.
 - b. Consulting a dentist regularly for inspection and whenever a tooth aches.
- 4. Knowledge
 - a. Difference between baby teeth and permanent teeth in structure and number.
 - b. Effect of improper food, improper brushing, and neglected cavities upon teeth and gums.

- c. Causes of crooked teeth are
 - (1) Baby teeth removed too early or too late.
 - (2) Adenoids.
- d. Causes of unhealthy gums are
 - (1) Improper food and brushing of teeth.
 - (2) Fillings with rough edges.
 - (3) Collecting of tartar and food on teeth.
 - (4) Infections such as pyorrhea, abscess, gumboils.
- e. Food having mineral content such as milk, fresh vegetables, and fresh fruits should be eaten.

References:

Metropolitan Life Insurance Company, **Care of the Teeth.**
 Andress and Evans, **Health and Good Citizenship**, pp. 59-67.
 O'Shea and Kellogg, **Building Health Habits**, pp. 163-172

V. Sanitation Survey of Our School

A. School Room

1. Problems

a. Lighting

- (1) Is the window space at least one-fifth of the floor space?
- (2) Is every desk well lighted?
- (3) Are the desks so placed as never to face direct sunlight?
- (4) From which direction does the light enter the room?
- (5) Are the walls light-colored and clean?

b. Temperature

- (1) Is there a thermometer in each room?
- (2) Is a daily temperature chart kept in each room?
- (3) Is the temperature kept between 66° and 70°?
- (4) How is the building heated?

c. Ventilation

- (1) Does the air smell clean and fresh?
- (2) How is fresh out-door air let in?
- (3) How does stale air get out?
- (4) What makes air stale?
- (5) Is there some way for furnishing moisture to the air?
Why do we need moisture in the air?
- (6) How can you tell whether air has sufficient moisture?
How much moisture should air in a school room have?

2. Activities

- a. Measure the square units in the window space and in the floor space.
- b. Keep an hourly temperature chart.
- c. Draw a room plan showing windows and radiators.
- d. In science class, measure humidity before and after a pan of water has been left in school room.
- e. Find number of cubic feet of air per child in room.

3. Habits and Attitudes

- a. Keeps desk in good order without directions from teacher.
- b. Keeps floor around desk free from waste paper.
- c. Takes active part in keeping blackboards, bulletin boards, and reading table in good order.
- d. Uses sitting posture that is best suited to good light for work at desk.

4. Knowledge

- a. The proper temperature for working conditions in a school room.
- b. How frequently a room should be ventilated.
- c. Window space should be one-fifth the floor space of the room.
- d. The number of cubic feet of air per pupil should be about 250.
- e. Air should be in circulation in the room to maintain satisfactory working conditions.

B. Toilets

1. Problems
 - a. Are they kept clean?
 - b. Are there sufficient facilities for washing hands?
2. Activities
 - a. Estimate the number of lavatories in relation to number of pupils using them.
 - b. Determine whether walls of toilet rooms have been marred by pupils' writing.
3. Habits and Attitudes
 - a. Throws paper toweling in proper container instead of on floor.
 - b. Takes active part in keeping walls of toilet rooms free from pencil markings.
 - c. Reports to teacher dirty condition of lavatories or toilets.
 - d. Is careful not to leave water in lavatory after washing hands.
 - e. Is careful not to waste supplies in toilet room.
4. Knowledge
 - a. Fresh air and sunlight are necessary in the toilet rooms.
 - b. Clean toilets and lavatories are healthful.

C. Playground

1. Problems
 - a. Is it large enough for the number of pupils using it?
 - b. Is it kept clean?
 - c. What equipment does it have?
2. Activities
 - a. Measure playground for size and shape.
 - b. Make a list of equipment on playground.
 - c. Make a list of equipment not on playground that could be used.
 - d. Work out a plan for use of playground, so that all pupils will have an opportunity for play.
 - e. Work out plan for taking care of equipment so it is not lost or destroyed.
3. Habits and Attitudes
 - a. Takes care of equipment so that it is not destroyed or lost.
 - b. Helps to keep playground free from paper and thrash.
4. Knowledge
 - a. Importance of keeping in condition so that all pupils can use it.
 - b. Importance of keeping equipment in good condition.

VI. Safety Survey of Our School

1. Problems
 - a. Are there enough exits to empty all rooms quickly in case of fire or other accidents?
 - b. Do all pupils know what to do in case of fire?
 - c. Do all the doorways in our building open outward?
 - d. Are stairways and hallways wide enough for people to pass quickly and easily?
 - e. Are all stairways and openings protected by railings?
 - f. Where do we play on the campus?
 - g. What places has Greeley provided for us to play? Does Greeley ever let us play on the streets? Should we play on the streets?
2. Activities
 - a. Determine the location of exits and fire escapes.
 - b. Measure width of hallways and stairways.
 - c. Examine the doorways to see how they are opened from the inside.
 - d. Organize a room safety committee to report on ways to prevent accidents in the school and on the playground.

3. Habits and Attitudes
 - a. Looks before going in and out of doors and does not push on stairways.
 - b. Helps very small pupils in going up and down stairways and on playgrounds.
4. Knowledge
 - a. Fire Prevention Week has been instituted because of the great loss of property and life due to fire.
 - b. Great loss of life due to avoidable accidents.
 - c. We must start now in learning how to prevent accidents.
 - d. In case of accidents on playground, call older person at once.

VII. Food

1. Problems
 - a. What is a good yet inexpensive diet?
 - b. What is the measure of food in heat and energy in one's body?
 - c. How many calories does my body need every day?
 - d. What amounts of common foods are necessary to give 100 calories?
 - e. What are the prices of common foods per pound? What number of calories is contained in each pound?
 - f. What foods are needed for a well-balanced meal (breakfast, lunch, dinner)? Review from fourth grade.
 - g. Is my favorite menu a well-balanced meal?
2. Activities
 - a. Plan menus for the different meals of the day. Select the best ones.
 - b. Estimate the number of calories provided by the foods included in these menus.
 - c. Estimate the cost of these menus.
 - d. Plan a school lunch providing one hot dish.
 - e. Prepare the school lunch and serve it to the pupils of the grade.
3. Habits and Attitudes
 - a. Proper habits of eating school lunches as well as regular meals at home.
 - b. Desire to be healthy through eating right kinds of foods at regular times.
4. Knowledge
 - a. Understanding that a calorie is used to measure the heat energy in foods.
 - b. Kinds of foods most valuable for providing heat and energy.
 - c. What a well-balanced menu is.

TABLE I*

Number of calories needed daily by a growing child who is of average weight for height and age:

Age	Calories per pound of body weight
1-2	45-40
2-5	40-36
6-9	36-32
10-13	34-30
14-17	30-23

TABLE II*

Number of hundred-calorie portions needed by children of varying ages:

Age	Boys	Girls
Under 2	9(00)-12(00)	9(00)-12(00)
2-5	10(00)-15(00)	10(00)-15(00)
5-9	13(00)-19(00)	12(00)-18(00)
9-12	17(00)-24(00)	15(00)-20(00)
12-14	23(00)-30(00)	19(00)-23(00)
14-16	26(00)-35(00)	21(00)-25(00)

*Rose, Mary Swartz, **Feeding the Family.**

TABLE III*

Quantity of common foods required to give one hundred calories.

Bread—

White, two slices, 3 in. x 3½ in. x ½ in.
 Whole Wheat, two slices, 2½ in. x 2¾ x ¼ in.

Cereals—

Cornflakes	1¼ cups	Grape-nuts	3 tbsp.
Oatmeal, cooked	1 cup	Puffed rice	1½ cups
Puffed Wheat	1½ cups	Rice, steamed	¾ cup
Wheat, shredded	1 biscuit	Cream of Wheat	

Dairy Products—

Butter	1 tbsp.	Buttermilk	1⅛ cup
Cheese (American)	1⅛ in. cube	Milk	⅝ cup
Cheese, Cottage	5½ tbsp.		

Fruits—

Applesauce	⅝ cup	Banana	1 large
Cantaloupe	1 melon, 4½ in. diam.		
Oranges	1 large		
Peaches	3 medium		
Peaches, canned	2 large halves, 3 tbsp. juice		
Pears	2 medium		
Apricots	3 medium		
Apple	1 large		
Raisins	¼ cup		
Raspberries	1½ cups		
Strawberries	1⅓ cups		

Meats—

Steaks (Beef)	1 slice 2 in. x 1½ in. x ¾ in.
Bacon	4-5 small slices
Lamb	1 chop, 2 in. x 2 in. x ½ in.
Pork	1 chop, 2 in. x 2 in. x ½ in.

Nuts—

Almonds	12-15 nuts
Brazil	2 nuts
Peanuts	20-24 single nuts
Peanut Butter	2½ tsp.
Pecans	12 meats
Walnuts, English	16 meats

Pies—

Apple	Section 1½ in. at circumference
Custard	Section 2 in. at circumference
Lemon	Section 1 in. at circumference
Mince Meat	Section 1 in. at circumference

Vegetables—

Asparagus, fresh	20 large stalks
Beans, baked	½ cup
Lima Beans, fresh	½ cup
Beets	4 beets 2 in. diam.
Cabbage, shredded	5 cups
Carrots	4-5 young carrots, ¾ in. 1
Cauliflower	1 small head
Corn	½ cup
Lettuce	2 large heads
Peas	¾ cup
String Beans	10 tbsp.
Potatoes, sweet, baked	½ medium
Potatoes, white, baked	1 medium
Potatoes, white, creamed	⅔ cup
Spinach, boiled	2½ cups
Tomatoes	1¾ cups
Onions	¾ medium

*Note: Taken from "Feeding the Family"—Mary Swartz Rose.

TABLE V

Food Values and Costs

	Costs per Pound as Purchased, in Cents	Costs per 100 Calories as Pur- chased, in Cents	Calories Purchased for Five Cents
Rolled oats	5	.28	1811
Corn meal	5	.31	1620
Beans, dry white.....	9	.58	869
Bread, white	9	.75	666
Rice	12	.75	663
Potatoes, Irish	4	1.36	369
Butter	52	1.49	336
Cheese	54	1.71	293
Potatoes, sweet	10	2.18	230
Milk, whole	7	2.26	221
Bananas*	7	2.33	214
Mutton, hind quarter.....	30	2.43	206
Corned rump	32	2.68	167
Onions	7	3.42	147
Mackerel	12.5	3.42	146
Beef ribs	40	3.53	142
Lamb, hind quarter.....	41	4.16	120
Cod, dressed	9	4.19	119
Cabbage	5	4.35	115
Beef, round, medium.....	39	4.38	114
Apples	10	4.55	110
Squash	5	4.76	105
Haddock	8.5	5.15	97
Beans, string	10	5.56	90
Beets	10	5.87	85
Beans, fresh lima.....	15	5.89	85
Grapes	20	5.97	84
Eggs, uncooked	40	6.30	79
Oranges	12	7.06	71
Veal cutlets	65	9.41	53
Flounder	12.5	10.85	46
Strawberries	23	13.15	38
Oysters, solids	45	13.41	37
Tomatoes	15	15.80	32

*Bananas calculated on the basis of 4.27 pounds to the dozen.

Note—Taken from "The Story of the Banana."

References:

Address and Evans, **Health and Good Citizenship**, pp. 77-94

Bigelow and Broadhurst, **Health in Home and Neighborhood**, pp. 1-70

VIII. Pure Water

1. Problems

- Where are the drinking fountains in our building? on the campus? in Greeley?
- In each place are there enough?
- Where does our water come from?

2. Activities

- Survey of water supply of homes of children in grade.
Wells—city water.
- Survey of water supply for Greeley.

3. Habits and Attitudes

- When hiking or camping—desires to know source of water before drinking it.
- Insists upon clean water for drinking, bathing, and swimming.
- Drinks 4-6 glasses water daily.

4. Knowledge

a. Necessity for pure water

- (1) For drinking.
- (2) For bathing.
- (3) For washing dishes.
- (4) For swimming—in rivers, lakes, public pools, sea.

b. Source of water

- (1) Underground water
 - (a) Wells—cisterns, artesian, driven.
 - (b) Spring.
- (2) Surface water
 - (a) Rivers and lakes.
 - (b) Melting snow and glacier.
 - (c) Reservoirs.
- (3) Rain water

c. Diseases spread by impure water as typhoid.

d. Purifying water.

- (1) Natural purification as in well water and springs.
- (2) Artificial purification
 - (a) Chemical as chlorine and iodine.
 - (b) Mechanical as filtering or boiling.

e. Keeping water pure.

- (1) Piping
 - (a) Clean pipes.
 - (b) Non-leaking.
- (2) Storage
 - (a) Wells.
 - (b) Cisterns.
 - (c) Springs.
 - (d) Reservoirs.
 - (e) Tanks and standpipes.
- (3) Home and school
 - (a) Clean water taps.
 - (b) Drinking fountains—proper use.
 - (c) Buckets, bottles, jars.

References:

Andress and Evans, **Health and Good Citizenship**, pp. 282-289
Health and Success, pp. 88-96

Bigelow and Broadhurst, **Health in Home and Neighborhood**, pp. 71-138

IX. Pure Milk

1. Problems

- a. Why should we insist upon pure clean milk?
- b. What is the value of milk as a food?
- c. How should we take care of milk after the dairyman has delivered it?

2. Activities

- a. Survey of milk supply in homes of children in grade and care of milk in the home.
- b. Visit to a dairy.
- c. Visit to a creamery.

3. Habits and Attitudes

- a. Drinks at least a pint of milk daily.
- b. Brings milk in from porch early in morning and keeps it in a cool place.
- c. Washes caps or covers of bottles before removing milk from bottle.

4. Knowledge
 - a. Importance of milk as a food. Review Fourth Grade outline.
 - b. Source of supply
 - (1) Family cow or goat.
 - (2) Dairy.
 - (3) Condensed and evaporated milk.
 - (4) Powdered milk.
 - c. Diseases spread by impure milk
 - (1) Typhoid.
 - (2) Tuberculosis.
 - (3) Scarlet fever.
 - d. Keeping milk pure
 - (1) Watching herd
 - (a) Correct food.
 - (b) Water.
 - (c) Clean stables.
 - (d) Clean equipment.
 - (e) Clean cows.
 - (f) Clean milkers.
 - (g) Free from ticks, parasites, etc.
 - (h) Free from disease.
 - (i) Tuberculosis test.
 - (2) Keeping milk fresh
 - (a) Clean
 - (b) Cool
 - (c) Pasteurization

References :

- Metropolitan Life Insurance Company—**All About Milk**
 Bigelow and Broadhurst, **Health for Every Day**, pp. 171-173
 Address and Evans, **Health and Good Citizenship**, pp. 290-298

X. Some Insect Carriers of Disease

A. House Fly

1. Problems
 - a. Why do we have flies?
 - b. What harm do flies do?
 - c. Where do we find breeding places in Greeley?
 - d. How can we help get rid of flies in Greeley?
2. Activities
 - a. Make or show models of fly traps.
 - b. List places in school district which may be breeding places of flies.
3. Habits and Attitudes
 - a. Is interested in cleaning up breeding places for flies.
 - b. Helps keep things clean so flies cannot find a breeding place.
4. Knowledge
 - a. Life history or stages in growth of fly.
 - b. Breeding places of fly.
 - c. Flies are of harm because they
 - (1) Annoy people.
 - (2) Spread disease.
 - (3) Contaminate food.
 - (4) Make things dirty.

References :

- O'Shea and Kellogg, **Building Health Habits**, pp. 198-209

B. The Mosquito

1. Problems

- a. Why do we have mosquitoes?
- b. What harm do they do?
- c. Where do they breed in Greeley?
- d. How can we help get rid of them in Greeley?
- e. What part have they played in our history?

2. Activities

- a. List places in Greeley where mosquito breeds.
- b. Show in science laboratory how use of oil destroys breeding place.

3. Habits and Attitudes

- a. Keeps all rubbish such as open water barrels, tin cans, etc., away so mosquitoes will not breed there.
- b. Prevents formation of pools of stagnant water.
- c. Keeps surface of such pools of stagnant water as are necessary covered with oil.
- d. Puncture cans, buckets, etc., before throwing them away.
- e. Keep weeds cut on your own lot and on vacant lots and road-sides.

4. Knowledge

- a. Learns life history of mosquito.
- b. Learns harm done by mosquito such as spreading malaria and yellow fever.
- c. Studies life of General Gorgas and Dr. Walter Reed in connection with history and geography.

Reference:

O'Shea and Kellogg, **Building Health Habits**, pp. 210-224

SIXTH GRADE

I. Our Health Standing

1. Problems

- a. What is my weight?
- b. How does it compare with that of the other boys and girls of my age?
- c. How much should I weigh?
- d. What is my score in the hand grip test and in chinning the bar?

2. Activities

- a. Health examination.
- b. Measurement of height and weight.
- c. Ability tests; spirometer, hand grip, chinning bar.

3. Habits and Attitudes

- a. Regular time for health examination.
- b. Desire for physical fitness.

4. Knowledge

- a. Correct weight for given height and age.
- b. Relationship of eating and of school lunch to weight.

References:

- Andress and Evans, **Health and Good Citizenship**, pp. 365-367
 Bigelow and Broadhurst, **Health for Every Day**, p. 100
 Hallock and Winslow, **Land of Health**, p. 200
 O'Shea and Kellogg, **Keeping the Body in Health**, pp. 279-280
 Payne, **We and Our Health**, Book III, p. 166
We and Our Health, Book IV, p. 195

II. Prevention of Diseases

A. What is being done in Greeley now?

1. Problems
 - a. Why are the restaurants downtown placarded with inspection cards?
 - b. What is the City Board of Health? What is its work?
 - c. Are the laws well enforced which help keep us well?
 - d. How do we guard against contagious diseases in our school?
 - e. How does our grade compare in absences with the other grades?
2. Activities
 - a. A visit to the city public health office.
 - b. Plotting of curve of absences in room due to illness.
 - c. To find out what the city health department does to insure pure water, pure food, and satisfactory eating houses.
3. Habits and Attitudes
 - a. Personal responsibility for caring for cleanliness of streets, public buildings, and for taking care of garbage in mountains or around wells or houses.
4. Knowledge
 - a. The laws of city or state regarding public health.
 - b. How these laws are enforced.

Reference :

Andress and Evans, **Health and Good Citizenship**, pp. 102-112, pp. 206-212, pp. 236-344

B. How the past has helped us

1. Problems
 - a. What contagious diseases do we have?
 - b. How have we learned to control them?
 - c. Why are they not so fatal now as formerly?
 - d. How have we learned to keep these diseases from spreading?
 - e. What men have done valuable work or made important discoveries about these diseases?
2. Activities
 - a. Find out the cases of contagious diseases the pupils know of as occurring within last year.
 - b. Find out how we prevented these diseases from spreading.
 - c. Study of lives of Pasteur, Trudeau, Reed, Jenner, Lister.
3. Habits and Attitudes
 - a. Desire to observe quarantine rigorously.
 - b. Habit of consulting a doctor without delay when ill in times of epidemic.
 - c. Epidemics of children's diseases can be prevented.
 - d. Appreciation of work done by scientists in the past in determining the causes of diseases.
4. Knowledge
 - a. History of contagious or infectious diseases, such as: tuberculosis, scarlet fever, diphtheria, yellow fever, smallpox, typhoid fever.
 - b. How to prevent these diseases.

References :

Andress and Evans, **Health and Good Citizenship**, pp. 212-229
Metropolitan Life Insurance Company, Series of booklets, **Health Heroes**

III. The Circulatory System

1. Problems
 - a. Of what is the blood composed?
 - b. What is the work of the blood?
 - c. What organ controls circulation?

- d. What are the parts of the heart?
 - e. What vessels carry blood and what is their work?
 - f. How does the blood circulate?
 - g. How is the blood purified?
 - h. Who discovered the facts about the circulation of the blood?
 - i. How can we have a healthy heart and circulatory system?
 - j. What is lymph? What relation does it have with the circulation of blood?
2. Activities
 - a. Examine model of the heart.
 - b. Make a diagram of the circulation of the blood.
 - c. Find out what effect exercise has on the heart and the circulation.
 - d. Count pulse before and after exercise.
 - e. Study the life of Harvey.
 3. Habits and Attitudes
 - a. Appreciation of the work done by Harvey.
 - b. Desire to have a healthy heart and circulation.
 - c. Habit of consulting a doctor for treatment in case of heart diseases.
 4. Knowledge
 - a. The important facts concerning the circulatory system including the lungs.
 - b. Knowledge of how to have a healthy heart.
 - c. What effect does the exercise have upon circulation?
 - d. Knowledge of the important facts of Harvey's life and work.
 - e. The number of deaths due to heart diseases.
 - f. The structure and use of the lymphatic system.

References:

- Andress and Evans, **Health and Good Citizenship**, pp. 102-112
Health Education
 Emerson and Betts, **Hygiene and Health**, pp. 79-84, 95-99
 Ritchie, **Primer of Sanitation**, p. 208
 Hutchinson, **A Handbook of Health**, pp. 108-129
 Blount, **Health**, pp. 112-118
 Ritchie, **Primer of Physiology**, pp. 39-51
 Emerson and Betts, **Physiology and Hygiene, Book Two**, pp. 90-114

IV. The Digestive System

1. Problems
 - a. How is our food made a part of our body?
 - b. What can we do to aid digestion?
2. Activities
 - a. Make a list of foods which digest easily.
 - b. Make a list of foods which are hard to digest.
 - c. Tabulate the length of time it takes certain foods to digest.
 - d. Make a list of health habits which will aid the digestion of food and the elimination of waste.
3. Habits and Attitudes
 - a. Desire to aid digestion by observing careful eating habits.
 - b. Desire to have good health thru the proper elimination of waste.
4. Knowledge
 - a. Organs of digestion and elimination.
 - b. The digestive juices.
 - c. The process of digestion and elimination.
 - d. How we can aid the digestion of food and the elimination of waste.

References:

- Hutchinson, **A Handbook of Health**, pp. 4-20
 Ritchie, **Primer of Physiology**, pp. 145-156
 Blount, **Health**, pp. 100-111
 Andress and Evans, **Health and Good Citizenship**, pp. 68-75
 Emerson and Betts, **Physiology and Hygiene, Book II**, pp. 184-191

V. The Bony and Muscular Framework of the Body

1. Problems
 - a. What constitutes good posture?
 - b. How can we have good posture?
2. Activities
 - a. Collecting pictures of examples of good and bad posture.
 - b. Use of models or pictures to illustrate the bony framework.
 - c. Use of models to illustrate good posture.
3. Habits and Attitudes
 - a. Desire to have good posture.
 - b. Desire to have a well-formed body.
4. Knowledge
 - a. How we can have good posture.
 - b. How we can have healthy bones.
 - c. The important parts of the body framework.
 - d. The function of the bones.
 - e. The structure of the bones.

References:

- Andress and Evans, **Health and Good Citizenship**, pp. 23-29, 42-49
 Ritchie, **Primer of Physiology**, pp. 16-38
 Hutchinson, **A Handbook of Health**, pp. 202-215
 Emerson and Betts, **Physiology and Hygiene**, pp. 1-48
Hygiene and Health, pp. 100-106

VI. The Nervous System

1. Problems
 - a. How can I have a healthy mind?
 - b. How can I develop good habits?
2. Activities
 - a. List habits that make our work better.
 - b. List habits that make us good playmates.
3. Habits and Attitudes
 - a. To form good habits of living.
 - b. To break bad habits of living.
4. Knowledge
 - a. How to have good habits of work and play.
 - b. Of what the nervous system is composed.
 - c. How the nervous system works.
 - d. How to care for the nervous system.

References:

- Emerson and Betts, **Physiology and Hygiene, Book Two**, pp. 56-89
 Andress and Evans, **Health and Good Citizenship**, pp. 142-155
 Ritchie, **Primer of Physiology**, pp. 91-108
 Hutchinson, **A Handbook of Health**, pp. 216-227, 235-240
 Emerson and Betts, **Hygiene and Health**, pp. 1-7

VII. The Ductless Glands

1. Problems
 - a. What causes some people to become giants?
 - b. Why are some people dwarfs?
2. Activities
 - a. Collect pictures and articles relating to persons suffering from diseases of the ductless glands.

3. Habits and Attitudes
 - a. Desire to avoid diseases due to poor functioning of the ductless glands.
 - b. Desire to eat food which would aid the glands in functioning properly.
 - c. Habit of consulting a physician in case of unnatural growth.
4. Knowledge
 - a. The names and location of the important glands.
 - b. The function of each gland.
 - c. How to keep the glands healthy.

References:

Andress and Evans, **Health and Good Citizenship**, Chap. XI
 Blount, **Health**, pp. 36-37
 Ritchie, **Primer of Physiology**, pp. 244-252

VIII. How to be Attractive

1. Problems
 - a. What constitutes an attractive appearance?
 - b. How can I have an attractive appearance?
2. Activities
 - a. Pictures to illustrate persons who are attractive.
 - b. Keeping of charts as a result of health inspection by nurse or teacher.
3. Habits and Attitudes
 - a. Desire to be clean and neat.
 - b. Desire to be attractive.
4. Knowledge
 - a. Factors that make for an attractive appearance.
 - b. How to be attractive
 - (1) How to care for the skin.
 - (2) Appropriate clothing to wear, and how to care for it.
 - (3) How to care for the nails.
 - (4) How to care for the hair.
 - (5) How to care for the teeth.

References:

Andress and Evans, **Health and Good Citizenship**
 Emerson and Betts, **Hygiene and Health**, pp. 113-117, 118-123, 140-145,
 146-151, 152-157
 Bigelow and Broadhurst, **Health for Every Day**, pp. 131-160

IX. How to prevent accidents

1. Problems
 - a. What are the most common accidents?
 - b. How may accidents be prevented?
2. Activities
 - a. List accidents which the pupils have read or heard about.
 - b. Find out which accidents cause the most deaths.
 - c. List accidents occurring in our school or city.
 - d. Class demonstration of right and wrong types of acts in which safety is involved: as crossing streets, going up and down stairways, riding bicycles, using the playground, etc.
3. Habits and Attitudes
 - a. Desire to avoid accidents.
 - b. Desire to keep others from being injured.
4. Knowledge
 - a. How many deaths due to accidents occur in the United States each year.
 - b. Which accidents cause the most deaths.
 - c. How accidents may be prevented.
 - d. Laws regulating the riding of bicycles on streets and highways.
 - e. Laws regulating crossing of streets.

References:

Health Education, p. 18

Andress and Evans, **Health and Good Citizenship**, pp. 170-181

Hutchinson, **A Handbook of Health**, pp. 314-330

Bigelow and Broadhurst, **Health for Every Day**, pp. 1-35

O'Shea and Kellogg, **Building Health Habits**, pp. 258-262

X. How to avoid accidents common to winter.

1. Problems
 - a. What are the accidents common to winter?
 - b. How can we avoid these accidents?
2. Activities
 - a. List accidents.
 - b. List accidents occurring in our school.
3. Habits and Attitudes
 - a. To avoid accidents.
 - b. To keep other people from being injured.
4. Knowledge
 - a. Accidents common to winter
 - (1) Cars skidding on slippery streets.
 - (2) Falling on slippery sidewalks.
 - (3) Frostbite.
 - (4) Hurting people with snowballs.
 - (5) Fires caused by overheated stoves or furnaces.
 - b. How to prevent these accidents
 - (1) Ashes on sidewalk.
 - (2) Driving with chains on car.
 - (3) Regulating fires.
 - (4) Not skating or coasting on sidewalks or used streets.
 - (5) Not making hard snowballs.
 - (6) Protecting body from cold.

References:

Payne and Schroeder, **Health and Safety in the New Curriculum**

Emerson and Betts, **Hygiene and Health**, p. 184

Bigelow and Broadhurst, **Health for Every Day**, pp. 1-35

XI. How to administer first aid treatment

1. Problems
 - a. What should we do when an accident occurs?
 - b. What materials are necessary to have?
2. Activities
 - a. Demonstration of first aid work on pupils in classroom.
 - b. Demonstration of first aid treatment by a trained person.
3. Habits and Attitudes
 - a. In case of injury call on older person first.
 - b. Desire to know how to give first aid treatment.
4. Knowledge
 - a. Knowledge of how to apply first aid in case of
 - (1) Drowning
 - (2) Clothing on fire
 - (3) Nose bleed
 - (4) Wounds
 - (5) Woodtick bites
 - (6) Bleeding from cut
 - (7) Frostbite
 - (8) Broken bones
 - (9) Poison Ivy
 - (10) Sprains and dislocations
 - b. What material to have on hand for first aid treatment.
 - c. Whom to call in case of injury.

References :

Boy Scout Manual

Girl Scout Manual, Campfire

Campfire Manual

Red Cross Handbook

Andress and Evans, **Health and Good Citizenship**, pp. 182-189, 334-336

Ritchie, **Primer of Physiology**, pp. 22-23

Hutchinson, **A Handbook of Health**, pp. 314-330

Emerson and Betts, **Hygiene and Health**, pp. 178-184

Bigelow and Broadhurst, **Health for Every Day**, pp. 1-35

Payne, **We and Our Health**, Book II, Book III, Book IV

Suggestions—

Suggestions—

PART IV

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2. Department of Interior, Bureau of Education, Health Bulletin No. 11 (1922), **Milk and School Children**
3. Dresslar, F. B., **School Hygiene**, Macmillan Company
4. Eddy, W. H., **Vitamine Manual**, Williams and Wilkins Company, Baltimore
5. Joint Committee on Health Problems in Education, **Health Education**. Prepared under the direction of Thomas D. Wood, 525 West 120th st., New York City, 1925
6. Payne-Schroeder, **Health and Safety in the New Curriculum**, American Viewpoint Society, New York
8. Wootten, K. W., **A Health Education Procedure**, National Tuberculosis Association, New York

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1. Baldwin, Bird T., **Physical Growth of School Children**, University of Iowa Extension Bulletin No. 59
2. Payne, E. G., **A Complete Plan of School Instruction in Accident Prevention**, Elliott Service Company, New York City

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3. Bigelow and Broadhurst, **Health for Every Day**, Silver, Burdett and Company
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5. Blount, R. E., **Health**, Allyn and Bacon
6. Chambers, Mary D., **Nature Secrets**, Atlantic Monthly Press
7. Emerson and Betts, **Hygiene and Health, Book I**, Bobbs Merrill
8. Emerson and Betts, **Physiology and Hygiene, Book II**, Bobbs Merrill
9. Hallock and Winslow, **Land of Health**, C. E. Merrill Company
10. Hutchinson, Woods, **A Handbook of Health**, Houghton Mifflin
11. Jewett, F. G., **Good Health**, Book I of Gulick Hygiene Series, Ginn and Company
12. O'Shea and Kellogg, **Building Health Habits**, Macmillan Company
13. O'Shea and Kellogg, **Keeping the Body in Health**, Macmillan Company
14. Payne, **We and Our Health**, Books I, II, III, IV, The American Viewpoint Society, Inc., New York City
15. Ritchie, **Primer of Sanitation**, World Book Company
16. Ritchie and Caldwell, **Primer of Hygiene**, World Book Company
17. Ritchie, **Primer of Physiology**, World Book Company

Bulletins

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2. Camp Fire Girls, **Camp Fire Manual**, 527 Fifth Avenue, New York City
3. Girl Scouts, **Girl Scout Manual**, 527 Fifth Avenue, New York City
4. Metropolitan Life Insurance Company, posters, charts, and booklets, New York City
5. American Red Cross, **Red Cross Handbook**, Washington; D. C.

Suggestions—

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