

A PROPOSED SYLLABUS IN HEALTH  
FOR GRADES 9-12

by

445

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## INTRODUCTION

The teaching of health in the secondary schools has progressed from incidental reference to health practices in the classroom to the development of a specialized subject area that is required in most states.

The value of teaching health on a systematic basis is a necessity for the teacher. Incidental learning resulting from a poorly planned presentation contributes little, if any, lasting knowledge and understanding in the development of desirable health practices and attitudes. These desirable health practices and attitudes are the most important task of the teacher in any health education program.

## THE PROBLEM

Statement of the problem. The purpose of this study is to provide an organized syllabus with resources to fill a gap in the educational planning and preparation of the writer for his future teaching.

The past two years of teaching at Fort Riley Junior High School in Junction City, Kansas has been unsupervised and poorly motivated with no effort by the school system to organize a course of study for any subjects in the secondary schools. The writer felt that in order to teach health and proper health practices he should organize a syllabus with



current information supplemented with resource materials to provide a sound base from which he could draw material for unit and daily planning.

#### SCOPE AND PROCEDURE

Limits of the study. The subject matter contained in this paper was organized and written for the purpose of providing a source of materials and a listing of important topical information that could be used in preparation for the teaching of health to students in grades nine through twelve. The writer feels that in order to present information to students more than one source of information should be used. The proposed syllabus is not meant to be a daily teaching plan. The syllabus is organized on a large unit basis to provide a guide in preparation.

Procedure. The procedure of organizing this paper follows an outline approach. The organizational plan used was a combination of various outline topics with some organized by the writer and others as were suggested by Dr. C. M. Peccolo, the writer's major adviser.

The body of the paper is divided into seven major units with the objectives, content, activities, and resources illustrated in each unit. The first unit is entitled "Systems That Guide Your Life".

UNIT I  
SYSTEMS THAT GUIDE YOUR LIFE

I. Statement of Significance

- A. The purpose of this Unit is to acquaint the students with the anatomy and physiology of the skeletal and muscular systems, the nervous system, the endocrine system, the circulatory system, and the respiratory system.

Very few, if any, students entering the secondary grades have a workable knowledge of these basic components of physical being. It is the purpose of this unit to introduce the students to these systems and to provide them with an opportunity to understand the intricacies of their bodies.

II. Objectives

- A. Subject: Skeletal System
1. To gain knowledge of the skeletal structure
  2. To understand the purpose of cartilage and ligaments.
- B. Subject: Muscular System
1. To develop an understanding of muscular function
  2. To understand the flexion and extension of muscular system.
- C. Subject: The Nervous System
1. To learn about the various parts of the nervous system
  2. To develop an understanding of the structure and function of the nervous system
- D. Subject: The Endocrine System
1. To present factual information about the glands
  2. To create an interest in glandular functions
- E. Subject: Hygiene of Circulation
1. To develop an understanding of the circulatory system
  2. To develop an understanding of the system in relation to personal health
- F. Subject: The Respiratory System
1. To understand respiratory functions
  2. To provide information to help individuals in the care of this system and maintain health

III. Course Content

- A. Subject: Skeletal System
1. The living bone
    - a) Blood supply
    - b) Length and Diameter
    - c) Repairs in bone structure

2. The bone combines living parts and non-living parts
  - a) The living parts are:
    - (1) Cartilage cells
    - (2) Bone cells
    - (3) Nerves
    - (4) Blood vessels
  - b) The non-living parts
    - (1) Include a gelatinous substance from which we get gelatin and mineral matter
3. Bones grow harder with chronological age
  - a) Through the depositing of the following minerals
    - (1) Calcium carbonate
    - (2) Calcium phosphate
  - b) Minerals are deposited throughout bone cells, which are arranged with wide spaces between them
4. Cartilage of the skeletal system is of two types
  - a) Temporary cartilage
    - (1) Cartilage cells replaced by bone cells
  - b) Permanent cartilage
    - (1) Cartilage that remains with the body throughout life
5. Structure of bone
  - a) The head
    - (1) Ball-shaped knob forming the joint
  - b) The spongy ends
  - c) The shaft
  - d) The periosteum
    - (1) Outer covering of the bone
    - (2) Nourishing bone
  - e) The bone layer
    - (1) Where the bone cells have deposited minerals
  - f) The marrow
    - (1) Red marrow
      - (a) In the spongy area near joint ends
    - (2) Yellow marrow
      - (a) Occupies the cavity of shaft
6. Bone development
  - a) Matrix
    - (1) Soft substance surrounding cartilage cells at birth
      - (a) Matrix is a temporary condition
      - (b) Cartilage replaces matrix
  - b) Ossification
    - (1) Hardening process
      - (a) Replacement of cartilage by bone cells
      - (b) Deposit of minerals throughout the bone cells



- (2) Process takes place in the center of the bones
    - (a) This permits growth of the bone for years
- 7. Requirements for building strong bones
  - a) Minerals
    - (1) Calcium
    - (2) Phosphorus
  - b) Chemicals
    - (1) Vitamin D
      - (a) Prevents rickets
  - c) Hormones
    - (1) Pituitary glands
    - (2) Thyroid glands
- 8. Bone fractures
  - a) Fracture is a break of two types
    - (1) Partial break
    - (2) Complete break
  - b) Types of fractures
    - (1) Greenstick fracture
      - (a) Breaks fibers not the bone
    - (2) Simple fracture
      - (a) Bone doesn't pierce skin
    - (3) Compound fracture
      - (a) Most serious
      - (b) Bone is exposed to infection
- 9. Bone Surgery
  - a) Modern methods
    - (1) Shorten bone by removing a section
    - (2) Fractured bones united with pins
    - (3) Crushed bones repaired by grafting
    - (4) Replacing head of femur with artificial substitute
- 10. Bone infections
  - a) Bone infections are included in the name osteomyelitis
  - b) Causes of bone infection
    - (1) Bone bruises or injury
    - (2) Exposure of bone in fracture
  - c) Death rate of osteomyelitis reduced by use of penicillin
- 11. Beam, levers, and shields of the body
  - a) As beams the bones
    - (1) Support the body
    - (2) Give it form
  - b) As levers
    - (1) Work with muscles
    - (2) Move the body

- c) As shields
  - (1) Protected vital organs
    - (a) Cranium bones protect brain
    - (b) Breast bone protects heart
- 12. Different bones of the body
  - a) Vertebrae
    - (1) Cervical vertebrae
      - (a) Seven in neck region
    - (2) Thoracic vertebrae
      - (a) Twelve in chest region
    - (3) Lumbar vertebrae
      - (a) Five in abdominal region
    - (4) Eight carpals (form the wrist)
    - (5) Five metacarpals (from the wrist to the knuckles)
    - (6) Phalanges
- 13. Bones of the leg
  - a) Femur
    - (1) The thigh bone
    - (2) The largest bone in the body
  - b) Patella (kneecap)
  - c) Tibia (largest bone in lower leg)
  - d) Fibula (lower leg)
  - e) Seven tarsels (ankle bones)
  - f) Metatarsels (form arch of the foot)
  - g) Fourteen phalanges
- 14. Types of joints
  - a) Ball and socket
    - (1) Located in shoulder and hip
    - (2) Used for freedom of motion
  - b) Hinge
    - (1) Located in elbow, knees, and finger
    - (2) Used for power
  - c) Pivot
    - (1) Located in spine
    - (2) Used for turning as rotating
  - d) Gliding
    - (1) Located in the vertebrae
    - (2) Used for strong support
  - e) Angular
    - (1) Located in wrist and ankle bones
    - (2) Used for angular movement
  - f) Partially moveable
    - (1) Located near hips and ribs
    - (2) Used in slight motion only
  - g) Immoveable
    - (1) Bones of the cranium
    - (2) Used for protection

15. Joints make framework moveable
- B. Subject: Muscular System
  1. All muscles of the body but especially the skeletal muscles
  2. General functions
    - a) Movement
    - b) Maintenance of posture
    - c) Production of heat
  3. Types of muscle tissue
    - a) Skeletal
      - (1) Is a mass of cells
      - (2) Two ends connect to bones
    - b) Visceral
      - (1) Is flat sheets of tissue
      - (2) Forming layers of walls
    - c) Cardiac
      - (1) Muscle that forms the heart
  4. Nerve control of muscle
    - a) Skeletal is voluntary control
    - b) Visceral and cardiac are involuntary
  5. Skeletal Muscles
    - a) Skeletal muscles vary in
      - (1) Size
      - (2) Shape
      - (3) Arrangement of fibers
      - (4) Attachments
  6. Generalizations of skeletal muscle action
    - a) Contracts in response to nerve stimulus
    - b) Produce movement by pulling on insertion lines across joints
    - c) Muscles act in groups rather than singly
    - d) As muscle contracts, origin remains stationary
  7. Muscle names which describe action
    - a) Flexors decrease angle
    - b) Extensors increase angle
    - c) Abductors move bone away from the body
    - d) Adductors move bone toward the body
    - e) Rotators pivot upon its axis
    - f) Levators raise a part
    - g) Depressors lower a part
    - h) Sphinctors close openings
    - i) Tensor makes rigid
    - j) Supinatory turns palm upward
    - k) Pronators turn palm downward
  8. Weak places in abdominal wall where hernia may occur
    - a) Inguinal rings
    - b) Femoral rings
    - c) Umbilicus



9. Bursae
  - a) Small sacks containing synovial fluid
  - b) Located wherever pressure is exerted
  - c) Bursae acts as cushion relieving pain
10. Tendon sheets
  - a) Tube-shaped structures enclosing certain tendons
  - b) They facilitate gliding movements of tendons
11. Physiology of muscle tissue
  - a) Properties exhibited
    - (1) Irritability
    - (2) Contractibility
    - (3) Extensibility
12. Types of muscle contractions
  - a) Simple twitch (quick contraction from single stimulus)
  - b) Tetanus (smooth contractions)
  - c) Treppe (series of increasingly higher contractions)
  - d) Abnormal contractions
    - (1) Fibrillation
    - (2) Convulsions
    - (3) Spasticity
  - e) Chemical changes associated with muscle contractions
    - (1) Anaerobic glycolysis
    - (2) Tricarboxylic acid cycle
  - f) Fatigue (muscle has lost power to contract)
13. Posture
  - a) Position or alignment of body parts
  - b) Posture is maintained by muscle tone
  - c) Correct posture is essential to good health
14. Main muscles of the body
  - a) Trapezius (shoulder)
  - b) Pectoralis major (chest)
  - c) Biceps and triceps (arm)
  - d) Deltoid (shoulder)
  - e) Latissimus dorsi (back)
  - f) External oblique (abdomen)
  - g) Brachioradialis (forearm)
  - h) Rectus femoris (thigh)
  - i) Gastrocnemius (calf)
- C. Subject: The Nervous System
  1. The units of nerve structure
    - a) Primary unit is the neuron or nerve cell
      - (1) The cell body has a nucleus surrounded by cytoplasm



- (2) There are two types of extensions of the neuron
  - (a) Dendrites (carry impulses toward the cell body)
  - (b) Axons (carry impulses from the cell body)
- b) Classification of neurons according to function
  - (1) Afferent (sensory) transmit toward the central nervous system
  - (2) Efferent (motor) transmit away from the central nervous system
- c) Classification of neurons according to structure
  - (1) Multipolar-several dendrites only one axon
  - (2) Bipolar-only one dendrite and one axon
  - (3) Unipolar-singled process, an axon which divides into a central and a peripheral branch, the latter functioning as a dendrite
- d) Synapse is where the axon of one neuron contracts the dendrites of another neuron
- 2. The two divisions of the nervous system
  - a) The cerebrospinal which consists of the brain and the spinal cord
    - (1) Main parts of the brain
      - (a) Cerebrum
      - (b) Diencephalon
      - (c) Medulla oblongata
      - (d) Pons varolii
      - (e) Mid brain
      - (f) Cerebellum
    - (2) Protective coverings
      - (a) Bone
      - (b) Meninges
    - (3) The brain is composed of gray and white matter
    - (4) Cerebrospinal fluid serves as a support and cushions the brain from blows
    - (5) Twelve pairs of nerves
      - (a) Olfactory
      - (b) Oculomotor
      - (c) Optic
      - (d) Trochlear
      - (e) Trifacial
      - (f) Abducens
      - (g) Facial
      - (h) Auditory
      - (i) Glossopharyngeal
      - (j) Vagus

- (6) The spinal cord is located within the spinal cavity
    - (a) Located from the foramen magnum
    - (b) The outer covering is white matter (fibers)
    - (c) The inner material is gray matter (cells)
    - (d) Spinal cord is protected by bones and tissue
    - (e) Spinal cord exercises two main functions
  - b) The autonomic nervous system
    - (1) Acts without direction from the thinking part of you-the brain
    - (2) Activates visceral effectors, that is, smooth muscle, cardiac muscle, and glandular tissue
    - (3) Sympathetic or thoracolumbar division
      - (a) Helps the body meet emergencies
      - (b) Works against the parasympathetic system
    - (4) Parasympathetic system
      - (a) Works for the welfare of the body
      - (b) Works against the sympathetic system
    - (5) Functions as a unit
- 3. Common nervous ailments
  - a) Headaches are a common disorder
  - b) Migraine headache
  - c) Tics and nervous mannerisms
  - d) Encephalitis
  - e) Cerebral palsy
  - f) Poliomyelitis
  - g) Epilepsy
- D. Subject: The Endocrine System
  - 1. Functions of the Endocrine glands
    - a) Regulate growth
    - b) Control the rate of energy used
    - c) Develop sexual maturity
    - d) Establish emotional control
    - e) Regulate amount of mental activity
  - 2. Location and function of the ductless glands
    - a) The thyroid gland
      - (1) Located at the base of the neck
      - (2) Regulates the rate of metabolism
      - (3) Secretes a hormone called thyroxin
    - b) The parathyroid gland
      - (1) Located below the thyroid gland
      - (2) Controls the amount of calcium and phosphorus in the blood

- (3) Contributes to the efficiency of the nerves and muscles
- c) The adrenal glands
  - (1) Located above the pancreas
  - (2) Produce the hormone adrenin
  - (3) Acts as a trigger to sympathetic nervous system
- d) The pituitary gland
  - (1) Master gland located below the brain
  - (2) Produces a growth stimulating hormone
  - (3) Controls height of the individual
  - (4) Determines physical structure
- e) The pancreas
  - (1) Located in the viscera below the stomach
  - (2) Manufactures a hormone called insulin
  - (3) Regulates the use of the carbohydrates
- f) The gonads
  - (1) Reproductive glands of mammalia
  - (2) Testes in the male
  - (3) Ovaries in the female
  - (4) Development and control of sex organs
- g) The thymus gland
  - (1) Located between the lungs
  - (2) A factor in maturation
  - (3) Diminishes at the time of puberty
- h) The pineal gland
  - (1) Located in the brain
  - (2) Secretions terminate in adulthood
  - (3) Little is known about its function

E. Subject: Hygiene of Circulation

- 1. The importance of Circulation
  - a) The increase in circulatory diseases
  - b) Plan of the circulation
- 2. The blood
  - a) Red blood cells (erythrocytes)
  - b) White blood cells (leukocytes)
  - c) Plasma
    - (1) Water
    - (2) Gases
    - (3) Salts in the blood
    - (4) Protective substance
    - (5) Hormones
    - (6) Water substances
  - d) Blood types
  - e) Medical uses of blood
  - f) Blood pressure
  - g) Defects in the blood
- 3. The vessels
  - a) The arteries



- b) The veins
- c) Varicose veins
- d) Hardening of the arteries
- e) Structure of the blood vessels
- 4. The heart
  - a) Structure of the heart
  - b) Injury to the valves
  - c) Injury to the muscles
- 5. The convalescent heart
  - a) Care of the patient
  - b) Limits of the patient
  - c) Possible cures of certain ailments
  - d) The future of the convalescent heart
- 6. The influence of tobacco upon the heart
  - a) Need for accuracy
  - b) General effects of tobacco
    - (1) Harmful to the reproductive system
    - (2) Damages on the cycle of pregnancy
- F. Subject: The Respiratory System
  - 1. Essentials of Respiration
    - a) Oxygen of the air is taken upon the lungs and carbon dioxide is given out
    - b) The oxygen passes through a membrane in the lungs and goes into the blood stream
    - c) The oxygen carried by the blood stream is given off to the cells and carbon dioxide is taken up and carried off
  - 2. Desirable Temperature
  - 3. Proper humidity and the means to secure it
  - 4. Control of dust and dirt
  - 5. Bacteria in the air
  - 6. The value of sunlight
  - 7. The respiratory tract
    - a) The mechanics for respiration
    - b) The automatic control system
    - c) The anatomy of the respiratory tract
    - d) The anatomy of the control system
  - 8. Health of the Respiratory System
    - a) Care of the system
  - 9. Diseases of the Respiratory System
    - a) Tuberculosis
    - b) Cancer
    - c) Colds
    - d) Inflammation
  - 10. Tonsils
  - 11. Adenoids
  - 12. Hygiene of the Voice



#### IV. Activities

##### A. Introductory

1. Have the students take each other's pulse and then ask why do we need a pulse.
2. Demonstrate with a sharp object the difference in sensory perception in different areas.
3. Ask the students to list the various systems of the body and tell why they are important.
4. Use of annotated charts
5. Explanation of terms to be used

##### B. Developmental

1. Discuss the reason for having both living and non-living parts in bones
2. Why do we have bony processes?
3. How many types of bone are there?
4. What is the purpose of the skeleton?
5. What are the two parts of the nervous system?
6. Discuss the function of the thyroid gland.
7. Why is the pineal gland called the secret gland?
8. Have students make a chart of the endocrine glands explaining the function of each.
9. Discuss breathing.
10. Assign reports on artery and veins.
11. Discuss recent heart valve operations.

##### C. Culminating

1. Illustrate the relationship each system has with the other.
2. Discuss the possibility of a breach in function of any one of the systems.
3. Evaluate the learning of the students.
4. Oral reports of the various systems.

#### V. Evaluation

##### A. Objective Tests

###### 1. True-False

- a) A person need not exercise to have healthy muscles. False
- b) There are twelve pairs of cranial nerves. True
- c) The parathyroid is considered the master gland. False
- d) Blood makes up 7% of the body weight. True
- e) There are only two parts to the respiratory system. False

###### 2. Completion

- a) Abductors move bone away from the body.
- b) The spinal cord is located within the spinal cavity.

- c) The gonads are the reproductive glands of the male and the female.
- d) Systolic and diastolic refer to pressures present in the blood vessels.
- e) Oxygen of the air is taken up in the lungs and carbon dioxide is given out.

### 3. Multiple Choice

- a) Muscle tissue exhibits:
  - (1) Irritability                      (3) Atrophy
  - (2) Tonicity                        (4) Strength
- b) The number of people who suffer from migraine headaches is:
  - (1) 1,000,000                      (3) 7,000,000
  - (2) 15,000,000                      (4) 19,000,000
- c) The thyroid gland is:
  - (1) Located at the base of the neck
  - (2) Regulates the rate of metabolism
  - (3) Secretes a hormone called thyroxin
  - (4) All of these
- d) The largest part of the respiratory system is:
  - (1) Lungs                              (3) Voice box
  - (2) Mouth                              (4) Larynx

### B. Essay tests

1. Describe the structure of the bone.
2. Discuss the functions of the autonomic nervous system.
3. Briefly describe the functions and results of the pituitary hormones.
4. Describe the structure of the heart.
5. What is the function of the lungs and how do they perform this process?

### C. Teacher Observation

1. Progress in skills
  - a) Gathering materials
  - b) Improving vocabulary and spelling
  - c) Developing better oral expression
  - d) Participation in class discussion
2. Development of desirable attitude
  - a) Do the students have an idea of the relative importance of the material covered?
  - b) Has the study helped the pupils acquire an interest in their bodies?
  - c) Do the students understand the physical operation of breathing?

## VI. Materials and Resources

### A. Bibliography

1. Teacher References



- a) Anthony, Catherine, Anatomy and Physiology, C. V. Mosley Company, St. Louis, Mo., 1959, pp. 117-166 and 169-220.
- b) Auring, D. P., The Extremities, John H. Warfel, Philadelphia, Lea and Febrieger, 1960, pp. 16-23.
- c) Fait, Hollis, Health and Fitness for Modern Living, Allyn and Bacon, Inc., Boston, 1961, pp. 196-207.
- d) Gray, Henry, Anatomy of the Human Body, Charles Mayo Gross, Philadelphia, Lea and Febrieger, 1959, pp. 21-26.
- e) Hickman, Cleveland, Health for College Students, Prentice-Hall Inc., Englewood Cliffs, N. J., 1958, pp. 148-155.
- f) Karpovic, Peter, Physiology of Muscular Activity, Philadelphia, Saunders and Company, 1959, pp. 60-71.
- g) Nemir, Alma, M. D., The School Health Program, W. B. Saunders Company, Philadelphia and London, 1959, pp. 19, 188, and 244.
- h) Otto, J. H., Julian, C. J., and Tether, E. J., Modern Health, Henry Holt Company, New York, 1959, pp. 16-18, 369-70.
- i) Turner, C. E., Personal and Community Health, C. V. Mosley Company, 1959, pp. 80-101, 168-177.
- j) Williams, J. F., Personal Hygiene Applied, W. B. Saunders Company, Philadelphia, 1925, 48-51, 85, and 239-279.
- k) Youmans, W. B., Human Physiology, The Macmillan Company, New York, 1959, pp. 103, 155.

## 2. Student References

- a) Charters, W. W., Smiley, Dean F., and Strong, Ruth M., A Sound Mind, The Macmillan Company, New York, 1947, pp. 287-294.
- b) Otto, J. H., Julian, J. and Tether, E. J., Modern Health, Henry Holt Company, New York, 1959, pp. 16-18, 165-180, 214-233, and 369-70.

## B. Films

1. Muscles and Bones of the Body, Coronet, 1960, 11 min., Black and White, \$60. rental.
2. Human Skeleton, Bray, 1958, 38 min., Black and White.
3. Circulation-Why and How, Churchill-Wexler Film Productions, 801 W. Seward St., Los Angeles 38, California, Black and White, \$2.50, Color \$4.00 11 min.

4. Mr. Tompkins Inside Himself, Western Cine Service, 312 S. Pearl St., Denver, Colorado, \$45. rent, 45 minutes.
5. Functions of the Nervous System, 10 min., Knowledge Builders, 625 Madison Avenue, New York, New York, \$2.00.
6. Keep Your Head, 15 min., Zurich American Insurance Company, Chicago, Ill., free.
7. Endocrine Glands, Encyclopedia Britannica Films, Inc., 101 Marietta St., Atlanta 3, Georgia, Cost \$3.00.
8. Endocrine Glands and How They Affect You, McGraw-Hill Company, 330 West 42nd. St., New York, Cost \$95.00.
9. Air We Breathe, Mine Safety Appliances, Mr. F. C. Ferguson, Pittsburgh 8, Penn., 16 min. Black and white, free.
10. Respiration and Circulation, Air Force Film Library Center, 8900 South Broadway, St. Louis 25, Mo., free, 16 mm., 26 min., color and sound.



## UNIT II THE INNER WORLD

### I. Statement of Significance

- A. The purpose of this Unit is to present the students with the information necessary to understand the mind and the effect of the mind on physical and mental health.

The organization of content is divided into three sections. The first section is devoted to the principles of mental health to give the students an understanding of what causes mental problems. The second section is devoted to personality and the recognition of personality traits as well as the abnormal traits. The third section deals with the prevention and treatment of mental illness. Emphasis here should be placed on the understanding that mental illness can be cured and the best therapy for persons who have been mentally ill is patience and understanding.

This unit endeavors to disspell the old-fashioned ideas of mental illness and to help develop a knowledge of mental health.

### II. Objectives

- A. Subject: Principles of Mental Hygiene
1. To learn what causes mental illness
  2. To learn how to overcome mental illness
- B. Subject: You and Others
1. To develop an understanding of personality
  2. To understand extrovert and introvert behavior
- C. Subject: Prevention and Treatment of Mental Illness
1. To understand methods of treatment
  2. To learn how to help the mentally ill

### III. Outline of Content

- A. Subject: Principles of Mental Hygiene
1. Definition of Mental Retardation
  2. The meaning of normal and abnormal behavior
  3. Origins of Abnormal Psychology
  4. Geneogenic Factors and Chemogenic Factors
  5. Subconscious Mental Life
  6. Mental Deficiency and Mental Superiority
    - a) Concept of feeble-mindedness
    - b) Meaning of mental deficiency
  7. Hereditary and Environmental factors

8. Causes of Abnormality and Deficiency
  - a) Syphilis
  - b) Heredity
  - c) Alcoholism
  - d) Morbid emotional development
9. Individual Psychogenic Factors
  - a) Emotional growth
  - b) Organ functions
  - c) Intellect, mastery, motility, speech
  - d) Aggression and hostility
  - e) Dreams
  - f) Children's play
10. Classified Disorders
  - a) Schizophrenia
  - b) Manic-depressive psychosis
  - c) Huntington's chorea and Pick's disease
  - d) Neuroses
  - e) Feeble-mindedness
11. Defense Mechanisms
  - a) Repression
  - b) Projection
  - c) Reaction formation
  - d) Displacement
  - e) Rationalization
  - f) Intellectualization
  - g) Conversion
  - h) Compensation
  - i) Sublimation
  - j) Identification
  - k) Depression
12. Diseases that are associated with the birth process
13. Etiological Factors in Mental Retardation
  - a) Three large groups include:
    - (1) The prenatal
    - (2) The perinatal
    - (3) The postnatal
  - b) Cerebral Injury
    - (1) Due to factors associated with the birth process
14. Disorders
  - a) Childhood
    - (1) Neurotic traits
    - (2) Habit disturbances
    - (3) Conduct disturbances
  - b) Adolescence
    - (1) Sexual maturity
    - (2) Approach to adulthood, independence and self-assertion

15. Stress
  - a) Effects
  - b) Three degrees of emotional stress
    - (1) Mild neurosis
    - (2) Severe neurosis
    - (3) Psychosis
16. Classes of mental retardation
  - a) Idiot
  - b) Imbecile
  - c) Moron
17. Three groups of psychosis
  - a) Schizophrenia
  - b) Manic-depression
  - c) Psychotic depression
18. Abnormal conditions in the brain
19. Manic depression
  - a) Based on a single disease process
  - b) Consisting of some kind of metabolic instability
20. Characteristics
  - a) Primary
    - (1) Physical
    - (2) Intellectual
    - (3) Mental age
  - b) Secondary
    - (1) Frustration-proneness
    - (2) Self devaluation
21. Learning disabilities
  - a) Limited ability in generalization
  - b) Short memory and attention span
  - c) Limitations in incidental learning
  - d) Retarded language development
  - e) Educability
22. Learning and Mental Deficiency
  - a) Concept of mental deficiency
  - b) IQ
23. Speech and the Mentally Retarded Child
24. Relationship between intelligence and speech development
  - a) Mental subnormality
  - b) Illness or physical disability
  - c) Lack of sufficient speech stimulation
  - d) Oversolicitous parents who anticipate the child's needs
  - e) Overly strict parents who punish the child for speech errors
  - f) Intense shock, fright, or shame



25. Three aspects of adaption
  - a) Maturation
  - b) Learning
  - c) Social adjustment
26. Personal-social area
  - a) Impairment in interpersonal relations
  - b) Impairment in cultural conformity
  - c) Impairment in responsiveness
27. Social and economic effects of mental retardation
  - a) 211,000 persons in public institutions for the mentally retarded and epileptic in 1964
  - b) \$127,786,175 was the total operating cost of 91 public institutions
  - c) Leading cause of rejection for draftees in World War II
28. Effects of Mental Retardation upon family and community
29. Examples of disordered personalities
  - a) Psychosis
  - b) Neurosis
  - c) Psychosomatic disorders
  - d) Delinquent and psychopathic personalities
  - e) Lesser maladjustments
30. Anxiety and the breakdown of ordered behavior
31. Classification of symptom syndromes
  - a) Anxiety states, obsessional neurosis and hysteria
  - b) Phobias
  - c) Psychastenia
  - d) Anxiety hysteria
  - e) Dissociated conditions
32. Causes of the Organic Psychosis
  - a) Infection
  - b) Intoxication
  - c) Trauma
  - d) Endocrine dysfunction
  - e) Nutritional deficiencies
  - f) Growth of foreign tissue in the brain
  - g) Deterioration of tissue
33. Schizophrenia
  - a) History and Theory
  - b) Characteristics
  - c) Types such as simple, hebephrenic, and catatonic and paranoid
34. Delinquency and criminal behavior
35. Legal considerations of Mental Retardation
  - a) Protection and supervision
  - b) Provide educational and welfare services for all children



- c) Certification or commitment procedures
- d) Distinction of mentally subnormal and emotionally stunned or warped
- B. Subject: You and Others
  - 1. Knowing yourself
    - a) Consider how you appear to yourself
      - (1) What is self-evaluation?
      - (2) Influence of individuals
      - (3) Self-control
    - b) Personal appearance
      - (1) Are you neat in appearance?
      - (2) Behavior
        - (a) Speak correctly
        - (b) Show courtesy toward others
        - (c) Always appear happy
    - c) Discovering that personality traits are developed and not inherited
  - 2. Knowing others
    - a) How do you judge other people?
      - (1) By their appearance
      - (2) By their behavior
      - (3) By their attitude
    - b) What are the things you like best in your friends?
      - (1) Correct speech
      - (2) Good conversationalist
      - (3) Neat appearance
      - (4) Courtesy
- C. Subject: Prevention and Treatment of Mental Illness
  - 1. Prevention of Mental Illness
    - a) Proper personality development--parental guidance
      - (1) Sense of trust
      - (2) Sense of autonomy
      - (3) Sense of initiative
      - (4) Sense of accomplishment
      - (5) Sense of identity
      - (6) Sense of intimacy
    - b) Development of a sound mind-body relationship
      - (1) Proper emotional development
      - (2) Use of physical activity to release tensions
    - c) Proper training for intelligence level
      - (1) High IQ
      - (2) Normal IQ
      - (3) Below normal IQ
        - (a) Idiots
        - (b) Imbeciles
        - (c) Morons

## 2. Treatment of Mental Illness

- a) Psycho-neurosis
  - (1) Psychiatric guidance is the most effective treatment
- b) Psychosis
  - (1) Organic
    - (a) Senile dementia
    - (b) Psychosis with cerebral arteriosclerosis
    - (c) Chronic syphilis
  - (2) Functional
    - (a) Schizophrenia
    - (b) Manic depressive
    - (c) Paranoia
- c) Treatments found effective for mental illnesses
  - (1) Shock treatments
    - (a) Physical
    - (b) Mental
  - (2) Surgery (lobotomy)
  - (3) Tranquilizing drugs (most recent)
- d) Mental Hygiene movement
  - (1) Initiated by Clifford Beers--1908
    - (a) Due to developments in psychiatry
  - (2) Legal recognition of mental illness
  - (3) Development of mental hygiene counseling
  - (4) Expanded opportunities for training in psychiatry
  - (5) Extensive research into causes and treatment of mental illness
  - (6) Establishment of many local community psychiatric services

## IV. Activities

### A. Introductory

- 1. Present pamphlets and brochures to students to read and look at
  - a) Available from Mental Health Association
- 2. Have a short film introducing mental health problems
- 3. Encourage student questions concerning mental health and mental illness for later discussion

### B. Developmental

- 1. Assign basic reading material in student references
- 2. Have students make a list of new vocabulary words
- 3. Discuss major areas of mental illness
- 4. Assign reports of special interest

5. Have a local Mental Health representative make a presentation
6. Show a film "We Seek Sanity" to illustrate the feelings of mentally ill
7. Presentation of oral reports
8. Discussion of oral reports
9. Discuss recent newspaper articles concerning mental health
- C. Culminating
  1. Formation of generalizations through class discussion
  2. Panel discussion of one phase of mental illness
  3. Written reports concerning classifications of mental illness
  4. Arrange for a trip to a local mental hospital
  5. Provide further reference material for those who want to learn more about the subject
  6. Have students prepare a short chart showing the degrees of mental health, mental retardation, and mental illness

#### V. Evaluation

##### A. Objective tests

##### 1. True-False

- a) Geneogenic factors have nothing to do with mental illness. False
- b) Alcoholism causes abnormality. True
- c) Projection and repression are defense mechanisms. True
- d) You inherit your personality. False
- e) Childhood experiences do not affect adult personality traits. False
- f) Courtesy is never out of style. True
- g) A psychoneurotic person is always violent. False
- h) Senile dementia refers to an old age affliction. True

##### 2. Completion

- a) Sublimation is a mental mechanism that lies behind countless success stories.
- b) Mental illness is a condition in which the thought and emotional processes of a person have become so disturbed that he can no longer live comfortably with himself or with others.
- c) Schizophrenia is a state of mental illness characterized by illusions of grandeur.



## 3. Best Answer

- a) One of the following is a major factor in developing your personality: (1) Training (2) Heredity (3) Environment (4) Neighborhood kids (5) 1 & 3
- b) An accepted treatment of psychosis is (1) exercise (2) counseling (3) organic development (4) surgery
- c) Our four basic senses are part of: (1) Personality (2) Life (3) Organic development

## B. Subjective test

## 1. Essay

- a) What goes into a good personality?
- b) Tell how your appearance might help you to get along with others.
- c) Define and explain Psychosis.
- d) How are mental disorders prevented by a child's parents?

## C. Teacher Observation

## 1. Progress in skills

- a) Gathering materials
- b) Improving materials
- c) Improving spelling
- d) Oral expression

## 2. Development of desirable attitudes

- a) Do the students understand the importance of the material covered?
- b) Have the students developed an understanding of mental health problems?
- c) Have the students developed an interest in the treatment of the mentally ill?

## VI. Materials and Resources

## A. Bibliography

## 1. Teacher References

- a) Souer, W. W., Your Health Today, Harper & Brothers, New York, 1955, pp. 46-71.
- b) Dorcus, Roy M., Shaffer, G. Wilson, Textbook of Abnormal Psychology, White, Williams & Wilkins Company, Baltimore, 1935, p. 291.
- c) Holt, Rinehart, and Winston, Mental Retardation, New York, 1962.
- d) Maslow, A. H., Mittlemann, Bela, Principles of Abnormal Psychology, Harper & Brothers Publishers, New York, 1951.

- e) Pressey, Signey, and Pressey, Luella Cole, Mental Abnormality and Deficiency, The Macmillan Company, New York, 1926.
  - f) Thorpe, Louis P., The Psychology of Mental Health, The Ronald Press Company, New York, 1950.
  - g) Turner, C. E., Personal and Community Health, The C. V. Mosley Company, New York, 1959, pp. 1-68, 151-166.
  - h) White, Robert W., The Abnormal Personality, The Ronald Press Company, New York, 1956.
2. Student references
- a) Nicoll, J. S., Foster, J. C., and Bolton, W. W., Your Health, Today and Tomorrow, Laidlow Brothers Inc., River Forest, Illinois, 1958, pp. 53-84.
  - b) Otto, J. H., Tether, J. E., and Julain C. J., Modern Health, Henry Holt Company, New York, 1959, pp. 1-68, 71-118.

#### B. Films

- 1. Mental Health, Visual Aids Service, University of Illinois, \$4.40, 12 min., color.
- 2. More Attractive You, Association Films, free, 25 minutes, sound, color, Modern Talking Picture Service.
- 3. Mr. Finley's Feelings, 16 mm. sound, 10 min., color, animation, Association Films, Metropolitan Life Insurance Company, Modern Talking Picture Service, La Grange, Illinois, free.
- 4. Search for Sanity, Smith, Kline, & French Laboratories, Miss Jean Davidlow, Film Librarian, Medical Film Center, 1500 Spring Garden St., Philadelphia 1, Pennsylvania, 16 mm. sound, 30 minutes, 1954, free.
- 5. Unity of Personality, Pennsylvania State College, 1946, 18 minutes, sound, rent \$2.00.
- 6. We, The Mentally Ill, 1955, 16 mm. sound, 30 minutes, free, address is same as number 4 above.

## UNIT III HOW WE COMMUNICATE

### I. Statement of Significance

- A. This Unit attempts to acquaint the students with the importance of care for the sensory organs of sight and hearing as a means of communication. The sections dealing with the mouth, teeth, and skin are incorporated to show why appearance has such a great influence on the ability to communicate.

### II. Objectives

- A. Subject: Hearing and Speaking
  - 1. To better understand how we hear and what takes place in order that we may hear
  - 2. To obtain a knowledge of how voice is produced and how hearing affects speech
- B. Subject: Your Mouth and Teeth
  - 1. To gain a knowledge of the growth and structure of the teeth
  - 2. To develop a good plan of dental health practices.
  - 3. To understand the importance of teeth as they pertain to the appearance and health of the individual
- C. Subject: Your Skin
  - 1. To instill in the student the importance of skin care
  - 2. To provide the student with a method of combating skin defects and problems

### III. Outline of Content

- A. Subject: Hearing and Speaking
  - 1. Hearing, a priceless sense
    - a) Second only to sight
      - (1) 75% of communication is through hearing
      - (2) 15 million people have hearing defects
    - b) Make-up of the ear
      - (1) Outer ear
      - (2) Inner ear
      - (3) Middle ear
    - c) The ear at work
      - (1) Vibration, source of sound
      - (2) Outer ear to eardrum
      - (3) Eardrum vibration
      - (4) Bones of middle ear vibrate membrane across oval window of cochlea



- (5) Nerves send impulse to brain
- (6) Transferred to sound
- d) Care of ear
  - (1) Little care is required
  - (2) Guard against middle ear infection
- e) Cause of hearing loss
  - (1) Adhesions
  - (2) Otosclerosis
    - (a) Overgrowth of bone
    - (b) May be hereditary
    - (c) 10% of population have some degree of this
- f) Hearing test
  - (1) Watch test
  - (2) Whisper test
  - (3) Word-number-letter
- g) Hearing aids
  - (1) Types
  - (2) How they are used
- 2. Speaking--an overlaid function
  - a) Components of speech
    - (1) Lungs
    - (2) Diaphragm
    - (3) Rib muscles
    - (4) Larynx-vocal cords
    - (5) Pharynx
    - (6) Mouth
    - (7) Nose
    - (8) Lips
    - (9) Teeth
    - (10) Palate
    - (11) Tongue
  - b) Voice production
    - (1) Control of breathing
    - (2) Vibrating the tone
    - (3) Resonating the tone
    - (4) Articulation--shaping and projecting the sound
  - c) Saying what we hear
    - (1) Sense of hearing plays top roll
    - (2) Speech is association of sound with meaning
    - (3) Auditory speech center

## B. Your Mouth and Teeth

1. Construction
  - a) Parts (crown-neck-root)
  - b) Materials in the teeth
2. Types or kinds of teeth
  - a) Deciduous (primary)
  - b) Permanent (adult)
3. The teething process
  - a) Formation before birth
    - (1) Order in which tooth is formed
  - b) Teething signs
    - (1) Symptoms
    - (2) How to help the process
4. The first set of teeth
  - a) Number and names
  - b) Importance of preserving the primary teeth
5. Permanent teeth
  - a) Names and number
  - b) Ages at which they appear
6. Nutrition and Teeth
  - a) Before birth
  - b) After birth
  - c) Minerals and vitamins
  - d) Diet
7. Habits that affect the teeth and mouth
  - a) Thumb sucking
  - b) Mouth breathing
8. Dental caries
  - a) Causes
  - b) How they progress
  - c) How they prevented and controled
9. Periodental diseases
  - a) Definition
  - b) Gingivitis
  - c) Vincent's infection (trench mouth)
  - d) Pyorrhea
10. Malocculsion
  - a) Causes
  - b) Effects
11. Home care
  - a) Brushing
  - b) Procedure
  - c) Selecting a toothbrush, dentifrice, and mouth rinse
12. Home remedies
  - a) For toothache
  - b) To stop bleeding
  - c) Other remedies

### 13. Functions of the teeth

- a) Digestion
- b) Appearance
- c) Speaking

### C. Subject: Your Skin

#### 1. Skin and appearance

- a) Most abundance of all tissues of the body
- b) An essential element of appearance
- c) The first line of defense

#### 2. Structure of the skin

- a) Epidermis layer
  - (1) Protective
  - (2) Outer layer is non-living
- b) Dermis layer
  - (1) Contains glands of the skin
    - (a) Oil glands
    - (b) Sweat glands
  - (2) Contains the hair follicles
  - (3) Filled with blood vessels and nerves
    - (a) These nerves carry sensations of touch, pain, heat, cold, and pressure

#### 3. Skin care

- a) Cleanliness
  - (1) Tub bath
  - (2) Shower
- b) Weather exposure
  - (1) Windburn
  - (2) Chapping
  - (3) Sunburn
  - (4) Suntan

#### 4. Common skin defects and problems

- a) Blackheads, pimples, and acne
  - (1) Don't squeeze pimples
  - (2) Practice cleanliness faithfully
  - (3) Apply alcohol after washing
  - (4) Eat well-balanced diet
  - (5) Get plenty of sleep and exercise
  - (6) Avoid emotional upsets
  - (7) See a doctor
- b) Boils and carbuncles
  - (1) Boils are large-scale infections
  - (2) Carbuncles are many-headed boils
- c) Warts
  - (1) Caused by a virus
- d) Moles and freckles
  - (1) Brown moles are usually harmless
  - (2) Black moles are dangerous anywhere



- e) Cold sores and fever blisters
- f) Impetigo
  - (1) Is a contagious disease
  - (2) Forms a cluster of blister-like lesions
- g) Eczema
  - (1) Caused by emotional upsets or allergy
  - (2) The symptoms are red, swollen, scaly areas which "weep" a clear fluid and which may or may not itch
- h) Skin parasites
- 5. The skin as an organ of excretion
  - a) Deodorants, anti-perspirants, and perfumes
- 6. Functions of the skin
  - a) Covers the body
  - b) Keeps microbes from invading inner tissues
  - c) Gives off heat from blood
  - d) Secretes oil
  - e) Gives off wastes in form of perspiration
  - f) Regulates water balance in body
  - g) Contains sensations of touch, pressure, pain, heat, and cold
  - h) Produces vitamin K

#### IV. Activities

##### A. Introductory

1. Have two students stand face to face and try to communicate without speaking
2. Distribute pamphlets about hearing and speaking
3. Use of audiometer to measure hearing
4. Administer a visual chart test

##### B. Developmental

1. Assign reading material from basal text
2. Make a list of new vocabulary words
3. Use chart to illustrate the parts of mouth and throat
4. Present model of the eye taking it apart explaining the function of each part
5. Have a local dentist examine the students' teeth
6. Assign reports on teeth, location and purpose
7. Assign reports on the speech process
8. Assign reports on the ear and hearing
9. Discuss defects in sight and hearing
10. Present students reports to the class
11. Use a cut-away drawing to show the layers of skin
12. Have students name types of skin problems for discussion

## C. Culminating

1. Discussion of desirable practices
2. Panel discussion
  - a) Speaking
  - b) Hearing
  - c) Oral Hygiene
3. Class discussion summarizing major points of interest
4. Students prepare an illustration covering each section labeling each part

## V. Evaluation

## A. Objective tests

## 1. True-False

- a) The dentine is a small bone of the inner ear. False
- b) Fifteen million people have hearing defects. True
- c) All dental caries can be prevented. False
- d) Carbuncles are many-headed boils. True
- e) An overgrowth of skin with excess pigment is called a mole. True

## 2. Completion

- a) There are 32 teeth in a full set.
- b) The dermis is called the true skin.
- c) The auditory nerve sends impulses from the ear to the brain.
- d) Visual purple enables the eyes to adjust to the amount of light available.

## 3. Best Answer

- a) Which one of the following is a disorder of sight? (1) rigorus (2) myopia (3) abscess (4) astringent
- b) The most common ear infection usually occurs in the (1) outer ear (2) middle ear (3) inner ear (4) mastoid bone
- c) All but one of the following are parts of a tooth (1) dentine (2) anvil (3) enamel (4) cementum

## B. Subjective test

## 1. Essay

- a) In what way does hearing affect speaking and just how important is it?
- b) List and explain the functions of the teeth.
- c) Summarize the functions of the skin.
- d) Outline a procedure for care and treatment of acne.

### C. Teacher observation

1. Development of desirable attitudes
  - a) Do the students understand sight and the defects of sight?
  - b) Have the students developed a good plan for oral hygiene.
  - c) Do the students understand hearing and defects of the ear?
2. Progress in basic skills
  - a) Improving vocabulary
  - b) Improving spelling
  - c) Oral expression

## VI. Materials and Resources

### A. Bibliography

#### 1. Teacher references

- a) Bacon, E. S., Your Child's Teeth, E. P. Dutton and Company Inc., New York, 1927, pp. 21-89.
- b) Barbereaux, P. M., Vocal Resonance, The Christopher Publishing House, Boston, 1941, p. 113.
- c) Bauer, W. W., Your Health Today, Harper and Brothers, New York, 1954, pp. 236-251.
- d) Hartman, L., The Teeth and Mouth, D. Appleton and Company, New York, 1927, pp. 3-88.
- e) Johnson, Whendell, Speech Handicapped School Children, Harper and Brothers Publishers, New York, 1948, pp. 146-174.
- f) Stanley, Douglas, The Science of Voice, Carl Fisher Inc., New York, 1932, pp. 19-25.

#### 2. Student references

- a) Otto, J. W., Julian, C. J., and Tether, E. J., Modern Health, Henry Holt Company, New York, 1959, 64-99.
- b) Sarett, L., Foster, W. T., and Sarett, A. J., Basic Principles of Speech, Houghton Mifflin Company, Boston, 1958, pp. 211-240.

### B. Films

1. Hear Better: Healthy Ears, Missouri Division of Health, 10 minutes, Free, Black and white.
2. Teeth Are to Keep, Visual Aids Service, Division of University Extension, Urbana, Illinois, rent \$3.90, 11 minutes, colored.



3. Healthy Skin, Coronet Instructional Films, 65 East South Water Street, Chicago, Illinois, 1958, sound, black and white, \$60, 11 minutes. (elementary and junior high level)
4. Human Skin, Bray Studios, Inc., 729 Seventh Avenue, New York 19, New York, Sound, Black and white, Cost \$50., Rent \$3., 12 minutes.

C. Pamphlets

1. Neglected Facts About Your Hearing, Available free from Sears Roebuck & Company.
2. The Importance of Your Teeth, Available from Sears Roebuck & Company, free.

D. Charts

1. Your Teeth and Your Life, Public Affairs Committee, 22 East 38th Street, New York, New York, cost five cents.

## UNIT IV

### HEALTH PROTECTION THROUGH NUTRITION

#### I. Statement of Significance

- A. This Unit is divided into five interrelated sections dealing with the Digestive System. The purpose of the unit is to help the students understand the need for establishing sound dietary practices. The need for nutritional foods is overlooked many times by people today simply because they are not aware of their dietary needs. The unit begins with food needs and progresses through organization of a proper diet to digestion, and then to excretion and elimination.

#### II. Objectives

- A. Subject: Food Needs
1. To explain the body methods of regulating food supply.
  2. To understand and explain the need for and quantities of water and how it is found.
- B. Subject: Choosing Your Daily Diet
1. To develop an understanding of the importance of and the basis for planning the daily diet.
  2. To become acquainted with the importance of a balanced diet and the facts related to gaining and reducing diets.
- C. Subject: Digestive System
1. To inform the students of the structure and function of the digestive system.
  2. To show the student how he may use this knowledge to lead a healthier life.
- D. Subject: Nutritional Problems
1. To provide an understanding of diseases which are caused by nutritional problems.
  2. To develop an understanding of the underweight and overweight problem.
- E. Subject: Excretion and Elimination
1. To aid in the student's understanding of the elimination of solid and liquid waste from the body.
  2. To consider the normal activities of the excretory system that will suggest many health relationships.

### III. Outline of Content

#### A. Subject: Food Needs

##### 1. Food and energy

- a) Definition of food
- b) Definition of energy
- c) Underlying source (sun)
  - (1) Photosynthesis
- d) Three functions of food
  - (1) Energy for action
  - (2) Materials for growth
  - (3) Regulation of cellular activity

##### 2. Composition of Food

- a) Carbohydrates
  - (1) Heat and mechanical energy (function)
  - (2) Starches and sugars; grains (source)
- b) Fats
  - (1) Heat energy
  - (2) Milk, cream, butter, nuts and oils
- c) Proteins
  - (1) Growth and repair
  - (2) Fish, meat, and eggs
- d) Vitamins
  - (1) Aid growth, development, and function
  - (2) A, B, C, etc. (sources)
- e) Minerals
  - (1) Proper growth
  - (2) Eight main minerals and sources
- f) Water
  - (1) Keeps fluid character of blood and tissue spaces
  - (2) Contained in many foods

##### 3. Classification of food

- a) Power to yield energy
  - (1) Fats
  - (2) Carbohydrates
- b) Power to build tissue
  - (1) Protein
- c) Power to regulate processes
  - (1) Certain vitamin-containing foods

##### 4. Proper Diet

- a) How much should one eat
  - (1) According to purpose it serves in body
  - (2) Children more than adults
- b) Body's regulation of food supply
  - (1) Selection of proper food necessary
  - (2) Craving for body's needs
  - (3) Continued consciousness of diet is harmful



## 5. Water's sources

- a) Two types
  - (1) Surface waters
  - (2) Ground waters
- b) Quality of water (determining factors)
  - (1) Environment examination
  - (2) Bacteria examination
  - (3) Microscopic examination
  - (4) Chemical examination
  - (5) Physical examination
    - (a) Color
    - (b) Odors
- c) Purification
  - (1) Storage
  - (2) Filtration
  - (3) Chlorination
  - (4) Boiling

## B. Subject: Choosing Your Daily Diet

### 1. Daily diet needs

- a) Basic four
  - (1) Milk group - four or more cups for teenagers per day
  - (2) Meat group - two or more servings of meat, fish, poultry, or eggs
  - (3) Vegetables - fruit group - four or more servings including one green or yellow every day, one citrus, and two others including potatoes
  - (4) Bread-cereal group - four or more servings whole grain enriched, restored
- b) Other foods
  - (1) A selection of other foods such as fats, sweets, and unrefined cereals, to round out the diet
  - (2) Foods to provide caloric need for growth or maintenance of body weight
- c) Water
  - (1) Two-thirds of the body weight is water
  - (2) Body requires two to three quarts a day
  - (3) Should have two pints or four glasses to be drank as water with an ordinary mixed diet.

### 2. A Balanced Diet

- a) Includes from each group some of those foods necessary to the qualitative and quantitative requirements of good health
- b) Provides the vitamins, proteins, fluids and minerals necessary for effective function

- c) Provides an adequate amount of the starches and sugars
  - d) Includes an adequate amount of food units or calories to maintain the individual under usual activities at a normal weight for the age, sex, and height (2500-3000 for adolescent youth)
  - e) Provides an adequate amount of the bulky residue-containing foods
3. Some basis for planning the diet
- a) Body needs from foods
    - (1) Energy
    - (2) Repair
    - (3) Growth
  - b) Variety and appeal
    - (1) Combine the foods of a meal so that they have a variety in color, form, and arrangement
    - (2) Select some from each group of basic four groups
    - (3) Prepare foods in various ways but still let the value of the food come through
    - (4) Vary the seasonings
    - (5) Vary the menus but still keep a balanced diet
    - (6) Plan meals ahead by week or day
  - c) Consider the budget
    - (1) Income of the family
    - (2) Size of the family
    - (3) Cost of the food in the local area
    - (4) Different tastes of the family
4. Special diets
- a) Weight gain
    - (1) A less common situation and presents less problems
    - (2) Milk with extra cream added should be drank
    - (3) Increase the amount of meat, eggs, butter, and cream
    - (4) Drink a glass of milk between meals will help add weight but not hinder the regular meal
    - (5) Do not limit the diet to sweet and fatty foods
    - (6) Do not try to stuff yourself
  - b) Weight reduction
    - (1) The diet should be a long reach range program over a period of many months

- (2) Quick reduction rarely produces the desired permanent results
- (3) Daily diet should include
  - (a) One serving lean meat, fish or fowl
  - (b) One egg
  - (c) Three or four servings of vegetable, at least one green
  - (d) Two slices of whole grain or enriched bread
  - (e) Three servings of fruit, at least one citrus
  - (f) Three glasses of skim milk
- (4) The combination of foods must be well balanced and the diet must be strickly adherred to
- (5) Do not skip meals
- (6) Drink only water between meals

C. Subject: Digestive System

1. Digestive System

- a) Mouth
  - (1) Teeth
  - (2) Salivary glands
- b) Esophagus
  - (1) Mucous glands
  - (2) Passageway
- c) Stomach
  - (1) Structure
  - (2) Muscles
    - (a) Cardiac sphincter
    - (b) Pyloric sphincter
  - (3) Chyme
  - (4) Glands
    - (a) Acid glands
    - (b) Gastric glands
- d) Small intestine
  - (1) Structure
    - (a) Duodenum
    - (b) Jejunum
    - (c) Ileum
  - (2) Intestinal glands
    - (a) Erepsin
    - (b) Maltase
    - (c) Lactase
    - (d) Sucrase
  - (3) Absorption
    - (a) Villi
    - (b) Capillaries
    - (c) Lacteals



- e) Colon or Large intestine
  - (1) Structure
    - (a) Ascending colon
    - (b) Transverse colon
    - (c) Descending colon
    - (d) Sigmoid colon
    - (e) Appendix
  - (2) Peristalsis
  - (3) Water absorption
- f) Organs of digestive system
  - (1) Liver
    - (a) Secretes bile
    - (b) Hepatic duct
    - (c) Cystic duct
  - (2) Pancreas
    - (a) Amylase-carbohydrate digestion
    - (b) Lipase-fat digestion
    - (c) Trypsin-protein digestion
- g) Types of digestion
  - (1) Carbohydrate
  - (2) Fat
  - (3) Protein
- h) Diseases, growths, infections, and disorders
  - (1) Gall bladder disease
  - (2) Hepatitis of liver
  - (3) Ulcers of stomach and duodenum
  - (4) Cancer of stomach
  - (5) Food poisoning
  - (6) Food infection
  - (7) Appendicitis
  - (8) Constipation
  - (9) Spastic colon
  - (10) Diarrhea
  - (11) Indigestion
  - (12) Hemorrhoids

D. Subject: Nutritional Problems

1. Food infections

- a) Causes
  - (1) Poor sanitation
  - (2) Improper methods of handling foods
  - (3) Poor refrigeration
- b) Diseases which are a direct result of the above causes are:
  - (1) Staphylococcal food poisoning
  - (2) Typhoid poisoning
  - (3) Diarrhea of the newborn

- c) How we can eliminate these diseases
    - (1) Health instruction to food handlers
    - (2) Proper food preservation
    - (3) Restaurant sanitation
    - (4) Meat sanitation
    - (5) Milk sanitation and pasteurization
  - d) Who helps us to try to eliminate these diseases
    - (1) Federal Trade Commission
    - (2) Food and Drug Administration
    - (3) U. S. Public Health Service
    - (4) Bureau of Animal Industry
2. Food Allergy Symptoms
- a) Types
    - (1) Dizziness
    - (2) Swelling of mouth and throat
    - (3) Blisters on mouth and lips
    - (4) Abdominal discomforts
    - (5) Vomiting
    - (6) Nausea
    - (7) Diarrhea
    - (8) Constipation
    - (9) Intestinal cramps
    - (10) Headaches
    - (11) Colic
  - b) The cure for allergies is elimination of the food or foods which cause them
3. Overweight
- a) Causes
    - (1) Overeating
    - (2) Heredity
    - (3) Glandular
    - (4) Brain disorder
    - (5) Occupation
    - (6) It may be of psychological origin
  - b) Results of overweight
    - (1) Heart disease
    - (2) Diabetes
    - (3) Flat feet
    - (4) Arthritis
    - (5) Hernia
    - (6) High blood pressure
    - (7) Feelings of rejection
    - (8) Shorten of life span

#### 4. Underweight

##### a) Causes

- (1) Heredity
- (2) Mental and physical illnesses
- (3) Over-active thyroid gland

##### b) Cures

- (1) When underweight is due to illness, the person can gain weight only when the underlying disease is cured
- (2) When underweight is due to lack of sufficient food, then undernourishment is the problem that must be faced

#### E. Subject: Excretion and elimination

##### 1. Intestines

##### a) Movements of the small intestines

- (1) Two main kinds of movement are observed in the small intestines
  - (a) Peristaltic waves which carry the chyme onward
  - (b) Rhythmical segmentation which churns and mixes it with digestive juices

##### b) Movement of the large intestines

- (1) Peristaltic waves are sometimes carried from the small intestines
  - (a) They frequently precede peristaltic movement of the small intestine
  - (b) They occur usually two or three times every 24 hours
- (2) The Pelvic Colon becomes filled from the bottom upward, from here the wastes are forced from the body by the muscles in the diaphragm and rectal

##### 2. Kidneys

- a) The kidneys are two glandular organs that remove from the blood excess water and waste materials
- b) Efficient action of the skin makes less strenuous the demands upon the kidneys
- c) The waste materials removed by the kidneys are chiefly the end products of protein metabolism
- d) The kidneys eliminate water

##### 3. Skin

- a) Certain types of cells in the skin also work toward relieving
- b) The water from the sweat glands excrete sweat or perspiration
  - (1) Sweat is largely water



- (2) In temperate climate, about one-fifth of the water consumed is lost by evaporation from the skin
- c) Sweat glands and body temperature
  - (1) Principle means of maintaining constant body temperature
  - (2) As perspiration evaporates into the air, the skin is cooled
- d) Efficient action of skin makes less strenuous the demands upon the kidneys

#### IV. Activities

##### A. Introductory

- 1. Have the students make a list of the food they ate the previous day
- 2. Give students a food division chart to look at classifications
- 3. Distribute pamphlets on nutrition
- 4. Show a film illustrating dietary needs

##### B. Developmental

- 1. Assign reading in basal text
- 2. Diagram a typical teen-age diet
- 3. Present a chart of a recommended diet
- 4. Have students plan a menu for a week
- 5. Have students make a list of all food consumed for calorie count
- 6. Discuss dietary problems of teen-agers
- 7. Discuss adult dietary problems
- 8. Assign reports on dietary deficiency diseases
- 9. Discuss digestive process
- 10. Have students diagram and label digestive system
- 11. Illustrate digestion by using a model explaining digestive processes
- 12. Show a film illustrating digestive organs
- 13. Discuss excretion and the use of laxatives

##### C. Culminating

- 1. Have students discuss dietary problems in panel discussion
- 2. Have a doctor discuss principles of nutrition with the students
- 3. Evaluate the dietary plans formulated earlier by the students

#### V. Evaluation

##### A. Objective

- 1. True-False
  - a) The duodenum is a part of the stomach. False

- b) Dizziness can be a sign of a food allergy.  
True
- c) One serving of bread a day is sufficient for a teenage diet. False
- d) Kidneys remove carbon dioxide from the body.  
False

2. Completion

- a) Malnutrition is the term referring to acute dietary deficiencies.
- b) The first digestive action on starch takes place in the mouth.
- c) The main source of energy is the sun.
- d) Sugar when stored in the body is called glucose.

3. Best Answer

- a) Which of the following help remove body waste:  
(1) Heart (2) Liver (3) Brain (4) Carpals
- b) Foods have been grouped into the basis  
(1) Five (2) Four (3) Six (4) Seven
- c) A person can lead a reasonably normal life after removal of the (1) Liver (2) Stomach  
(3) Pancreas (4) Small intestines

B. Subjective

1. Essay

- a) Discuss the role of bile in fat digestion.
- b) Discuss the causes of a person becoming overweight.
- c) Give an example of a reducing diet for one day.
- d) Explain function of kidneys in removing of body waste.
- e) Define food, energy, calories, and diet.

C. Teacher Observation

1. Class participation

- a) Progress in subject matter
- b) Participation in discussion
- c) Oral reports
- d) Written reports

2. Comprehension of subject matter

- a) Do the students understand nutrition?
- b) Do the students know the parts of digestion?
- c) Have the students interests in the subject areas been discussed?

VI. Material and Resources

A. Bibliography

1. Teacher

- a) Byrd, O. E., College Hygiene, W. B. Saunders Company, Philadelphia and London, 1957.



- b) Byrd, Oliver E., Health Instruction Yearbook, Stanford University Press, Stanford, California, 1948, pp. 27-41.
- c) Chenoweth, Laurence B., School Health Problems, F. S. Crafts and Company, 1939, pp. 25-71.
- d) Clark, R. L., Cumley, R. W., The Book of Health, Elsevier Press Inc., Houston, 1953, pp. 81-83.
- e) Diehl, Harold S., and Thomson, Stewart Craig, Textbook of Healthful Living, McGraw-Hill, New York, 1960, pp. 77-83 and 102-104.
- f) Hickman, Cleveland P., Health For College Students, Prentice Hall Inc., Englewood Cliffs, N. J., 1963, pp. 185-216.
- g) Kerr, James, The Fundamentals of School Health, The Macmillan Company, pp. 95-132.
- h) Millard, Nellie D., Ring, Barry G., Human Anatomy and Physiology, W. B. Saunders Company, London, 1956, pp. 477-488.
- i) Otto, Julian, and Tether, Modern Health, Holt, Rinehart, and Winston Inc., 1959.
- 2. Student References
  - a) Curtis, Francis D., Biology In Daily Life, Ginn and Company, Chicago, 1959, pp. 227-241.
  - b) Diehl, Harold S., Healthful Living, New York, McGraw-Hill Book Company Inc., 1941.
  - c) Nicoll, James S., Foster, Julian C., and Bolton, William, Your Health Today and Tomorrow, Laidlow Brothers, New York, 1960, pp. 141-147.
  - d) Otto, J. H., Julian C. J., and Tether, E. J., Modern Health, Henry Holt Company, New York, 1959, pp. 274-293 and 297-317.

#### B. Films

- 1. The Minerals of Life, NET, 1958, 29 minutes, black and white, Patterns of life series, Rent \$4.75, Indiana University.
- 2. Balance Your Diet for Health and Appearance Coronet, 1960, 11 minutes, black and white, \$60.
- 3. Four Dimensions, 1955, 9 minutes, black and white, free.
- 4. Digestion in our Bodies, Coronet Instructional Films, 65 E. South Water St., Chicago, Illinois, Black and white, \$60, 11 minutes, 1961.
- 5. Nutritional Needs of our Bodies, Coronet Instructional Films, same as above.



6. Human Digestion, Athena Films Inc., 165 W. 46th St., New York, Rent \$3.00 black and white, 10 minutes, 1950.
  7. Elimination, Educational Film Department, United World Films Inc., 1445 Park Avenue, New York 29, New York, \$55.00, black and white, 12 minutes.
  8. Urinary System, Bray Studios Inc., 729 Seventh Ave., New York 19, New York, \$30. black and white, Rent \$2.
  9. Kidneys, Uretus, and Bladder, Bray Studios Inc., Cost \$50. Rent \$3.00 black and white, 15 minutes, Address same as in number 8.
- C. Filmstrips
1. Healthy, Happy, & Wise, McGraw-Hill, 1954, World Film, Wilmette, Illinois, \$5.00 color captions.
  2. Add One To Grow On, Facts About Figures, Why Foods Spoil, 35 mm film stripes from the Missouri Division of Health, State Office Building, Jefferson City, Missouri, free loan.
- D. Charts
1. Check Your Daily Diet, The Kroger Company, Educational Department, 1014 Vine Street, Cincinnati 1, Ohio, free.

UNIT V  
TOBACCO, NARCOTICS, ALCOHOL

I. Statement of Significance

- A. The use of alcohol and tobacco is a controversial issue that should not be omitted from a course in health instruction. Narcotics education is necessary to help protect the group that is so often exposed to the chances of addiction. The facts about tobacco and alcohol need to be presented in order to give the students a chance to better understand these social habits and the possible dangers involved in indulgence.

II. Objectives

- A. Subject: Tobacco and Health
  - 1. To learn about tobacco and where it grows
  - 2. To learn about cancer, tobacco, physical health, and their relationship to each other
- B. Subject: Narcotics
  - 1. To understand the problems and dangers of the major narcotics
  - 2. To understand how the addict can be cured
- C. Subject: Alcohol
  - 1. To present scientific facts about the use and effect of alcohol on the individual and society
  - 2. To recognize individual responsibility for the welfare of one's self and the welfare of others through the using of alcohol

III. Outline of Content

- A. Subject: Tobacco and Health
  - 1. History of Tobacco
    - a) Tobacco is a plant of the night-shade family, a cousin to the tomato and potato family
    - b) History of American tobacco first became known on October 12, 1492
      - (1) Indians wrapped the dried leaves in palm or maize in the manner of a market formed of paper
      - (2) The Caribs of the West Indies inhaled or snuffed a mixture that may have included tobacco through a hollow tube called tabaco or tobago

- (3) Indians used tobacco in the ceremonials; for example, in the smoking of peace pipes. They also used tobacco as medicine
- c) Introduced into Europe
  - (1) France, 1556; Portugal, 1558; Spain 1559; and England, 1565
  - (2) Jean Nicot, the French ambassador at Lisbon, Portugal in whose honor the genus Nicotiana was named, is said to have sent seed of N. Tobacum to Queen of France, Catherine DeMice
  - (3) England--Hawkins and his men were said to have introduced tobacco into England
- d) In 1965 sixty million people spent nearly five billion dollars on tobacco
  - (1) One out of every three women have the smoking habit
  - (2) Three out of every four men have the habit
  - (3) Average of one pack a day, American smoking public consumes more than one billion cigarettes each day
  - (4) Tobacco can easily be said to be the nation's leading habit

## 2. Lung Cancer

- a) According Surgeon General's Report, 1965
  - (1) "Lung cancer now kills over 33,000 Americans yearly having increased its annual toll fourfold in 20 years."
  - (2) They believe cigarettes are chief cause of lung cancer
    - "Statistical studies have shown that a man who smokes two packs of cigarettes a day has about one chance in ten of developing lung cancer." A non-smoker has one chance in 270.
  - (3) Lip and Tongue Cancer
    - (a) Lip cancers have definitely been traced to irritation caused by holding a pipe or cigar in the corner of the mouth
    - (b) Tongue cancer has also been found to be most common among people who smoke
  - (4) Tobacco and Respiration
    - (a) When a person smokes, the nose, throat, windpipe, and lungs are the organs which get the full effects of the smoke as well as the nicotine



- (5) Heart, Blood Vessels
  - (a) The nicotine in tobacco is absorbed into the blood by the lungs
  - (b) It causes the blood vessels to become smaller, thus raising the blood pressure
  - (c) Increases blood pressure and makes heart work harder, 28 more beats per minute
  - (d) Puts a strain on the heart
- (6) Smoking and Digestion
  - (a) Nicotine slows the digestive process by as much as one hour
  - (b) Digestion is delayed, acidity in stomach may increase to point of heartburn
- (7) Does smoking shorten life?
  - (a) According to American Cancer Society non-smokers have a tendency to live longer

B. Subject: Narcotics

1. Introduction

- a) A major problem in the United States (75,000 known addicts in 1965)
- b) Drug addiction
  - (1) Danger to nervous system
  - (2) Emotional addiction
  - (3) Physical addiction
  - (4) Withdrawal sickness
  - (5) Must be taken in increasing amounts
- c) Two types of drugs
  - (1) Sedative
  - (2) Stimulant

2. Opium and the drugs made from it

- a) Opium
  - (1) Contains all of five narcotic properties
  - (2) Comes from a milky juice extracted from unripe seed pods of an oriental poppy
  - (3) Is dark, gummy, has a bitter taste, and a heavy odor in its crude form
  - (4) Causes a dreamy stupor or unconsciousness when eaten
  - (5) Is a parent of a family of powerful drugs
- b) Morphine
  - (1) Made from opium
  - (2) A fine, white powder with a bitter taste
  - (3) Small doses relieve pain, larger doses produce sleep

- (4) Doctors avoid using it for any length of time because of patient becoming addicted
- c) Codeine
  - (1) Made from Morphine
  - (2) One-sixth the strength of morphine
  - (3) Used in cough syrups for sore throat
- d) Heroin
  - (1) Made from morphine
  - (2) Most addicting drugs made from opium
  - (3) The number one international dope problem
  - (4) Use in any form is illegal in United States
  - (5) Produced legally in six countries
  - (6) 30 times stronger than opium, 3 times stronger than morphine
- 3. Other Narcotic Drugs
  - a) Morphine substitutes
    - (1) Synthetic drugs produced by chemists
      - (a) Demerol
      - (b) Methanol
    - (2) Have some narcotic effect as opiates
  - b) Cocaine
    - (1) Comes from leaves of cocoa plant
    - (2) Doesn't have all the properties of opiates
      - (a) Doesn't cause physical symptoms of addiction
      - (b) Doesn't leave user with acute withdrawal sickness
    - (3) Mucus membrane is numbed when cocaine is applied to it
    - (4) Large doses cause a temporary feeling of liveliness and pleasure
  - c) Marihuana-Marijuana
    - (1) An intoxicating drug
    - (2) Found in flowers and leaves of Indian hemp plant
    - (3) Marihuana cigarettes
  - d) Novocain
    - (1) Synthetic drug
    - (2) Relative of cocaine (Much milder)
    - (3) Used in dentistry and spinal anesthetics
  - e) Barbiturates
    - (1) Synthetic drugs made from coal tar
    - (2) Medical use
      - (a) Prescribed for restless, uncomfortable patients
      - (b) Prescribed for patients who are unable to sleep

- (c) Used to quiet patients before surgery
- f) Bromides
  - (1) Salts which have a sedative affect on nervous system
  - (2) Contained in many patent medicines, nerve tonics, and headache remedies
  - (3) Repeated use causes a slow poisoning of nerve centers and a mental dependence on their quieting effect

C. Subject: Alcohol

1. Facts concerning alcohol
  - a) Definition of alcohol
  - b) History of alcohol
  - c) Kinds and Uses of Alcohol
    - (1) Methyl, butyl, and others
      - (a) Commercial
      - (b) Industrial
    - (2) Ethyl
2. Methods of producing alcoholic beverages
  - a) Fermentation
    - (1) Wines
    - (2) Alcoholic content is 10-20 percent
  - b) Brewing
    - (1) Beer and ale
    - (2) Alcoholic content is 4-5 percent
  - c) Distillation
    - (1) Whiskey, brandy, gin, and rum
    - (2) Alcoholic content is 40-55 percent
3. Alcohol in the body
  - a) Path of alcohol
    - (1) Stomach
    - (2) Intestines
    - (3) Liver or heart
    - (4) Brain
  - b) Methods of elimination
    - (1) Oxidation
      - (a) Regular
      - (b) Fixed rate
    - (2) Elimination
      - (a) Breath
      - (b) Perspiration
      - (c) Urine
4. Effects of Alcohol
  - a) Effects on the diet
    - (1) No craving for food
    - (2) Lack of vitamins and minerals
      - (a) Damage of liver



- (b) Damage to stomach
    - (c) Increase of nerve diseases
  - b) Effects on the body
    - (1) Loss of intelligent behavior
      - (a) Decrease in judgment
      - (b) Decrease in self-control
      - (c) Increase in emotional responses
    - (2) Decrease in muscular control
      - (a) Increase in reaction time
      - (b) "Thick-tongue" and slurred speech
      - (c) Muscle tremors
    - (3) Influence on sense organs
      - (a) Double vision
      - (b) Blurred vision
      - (c) Loss of ability to judge distance
      - (d) Color blindness
      - (e) Impaired hearing
      - (f) Loss of equilibrium
    - (4) Unconsciousness
      - (a) Decreased rate of breathing
      - (b) Reduced heart action and blood pressure
      - (c) Lowered body temperature
  - c) Effects of Blood Concentration
    - (1) Varied effects as concentration increases
      - (a) Noticeable breath odor at  $.1/100$
      - (b) Clumsy movements at  $.2/100$
      - (c) Staggering gait at  $.3/100$
      - (d) Helplessness at  $.4/100$
      - (e) Life in danger at  $.5/100$
    - (2) Legal limitation of  $.15\%$  for drunkenness in certain states
5. Social and Economic Effects of Alcohol
- a) Family life
    - (1) Financial problems
    - (2) Loss of employment
    - (3) Neglect of children
    - (4) Separation of family
  - b) Accidents
    - (1) Effect on driving
      - (a) Lowers efficiency
      - (b) Endangers and costs lives
    - (2) Current statistics (1964-One out of four fatal accidents involved drinking by the driver or pedestrian)
    - (3) Costs to the public

- c) Crime
  - (1) In 1965, 45 million crimes associated with alcohol
- d) Disease
  - (1) Lowering of resistance to infection
  - (2) Prospect for organic disease
  - (3) Aids the spread of venereal disease
  - (4) Alcohol user is poor insurance risk
- 6. Current statistics
  - a) Alcoholic beverages used by 67 million Americans
  - b) Alcoholics number approximately 5 million
  - c) Ratio of male alcoholics to female is 5.5 to one
- 7. Reasons for drinking
  - a) To gain group acceptance
  - b) To be sociable
  - c) To relieve physical or emotional discomforts
  - d) To relieve dissatisfaction with self or environment
  - e) Is addicted to alcohol
  - f) Minor reasons
    - (1) Medical purposes
    - (2) Improvement of food flavor
- 8. Proper attitudes toward alcoholism
  - a) Realization of alcoholism as illness
  - b) Realization that it can be cured
  - c) Realization that alcoholics are worth helping
  - d) Giving of wider public support
- 9. Organizational Aids for Alcoholics
  - a) Legislation
  - b) Women's Christian Temperance Union
  - c) Alcoholics Anonymous
    - (1) Organization of Alcoholics Anonymous
    - (2) Method of cure
      - (a) Admittance of addiction
      - (b) Contact of Alcoholics Anonymous
      - (c) Development of religious feelings
      - (d) Help from fellow members
    - (3) Results of Alcoholics Anonymous
      - (a) 20% of alcoholics attend
      - (b) 75% of these achieve favorable results
  - d) Yale Plan Clinics
    - (1) Location of clinics
    - (2) Method of treatment
  - e) Rehabilitation centers for alcoholics

#### IV. Activities

##### A. Introductory

1. Present a film about alcoholism
2. Illustrate the degrees of drinking with a chart
3. Have students list outward signs of drinking
4. Distribute information by Alcoholics Anonymous
5. Show a film on tobacco
6. Have students list the cigarette brands and slogans
7. Discuss current area narcotics cases with the students

##### B. Developmental

1. Assign reports on the problems of alcoholism
2. Have a representative of Alcoholics Anonymous discuss their procedures
3. Discuss why people drink
4. Have students give reports on the problems of alcoholics
5. Have students list reasons for smoking
6. Discuss smoking as a habit
7. Discuss smoking as a health hazard
8. Assign a student to report on the Surgeon General's Report of 1965
9. Discuss the types of cancer linked to smoking
10. Have a local law enforcement official describe problems of drug addiction
11. Discuss the various types or classes of narcotics
12. Discuss the synthetic drugs
13. Have students list the various depressants used in medicine
14. Discuss the process of becoming addicted

##### C. Culminating

1. Have three panel discussions; one on alcohol, one on tobacco, and the last on narcotics
2. Discuss the rehabilitation of drug addicts
3. Have the students write a paper describing the motives for smoking, drinking, and drug addiction

#### V. Evaluation

##### A. Objective tests

1. True-False
  - a) There is a direct relationship between lung cancer and smoking. True
  - b) It is a proven fact that cancer of the lip is caused by smoking. True
  - c) Cocaine is a member of the opiate family of drugs. False



- d) Heroin is thirty times stronger than opium.  
True
- e) If you are cold, drinking an alcoholic beverage will make you warm. False
- f) Alcohol is a depressant. True

2. Completion

- a) Smoking causes the blood vessels to become smaller thus raising the blood pressure.
- b) Marihuana is a narcotic drug usually found in the form of cigarettes.
- c) Bromide is a narcotic salt which has a sedative effect on the nervous system.
- d) A disease caused by the use of alcohol which hardens the liver is called cirrhosis.
- e) The time it takes for a muscle to work is called its reaction time.

3. Multiple Choice

- a) According to the American Cancer Society:  
(1) Smoking causes cancer. (2) Cancer is related to smoking. (3) Smoking and cancer are as far apart as day and night. (4) Lung cancer is more common in women.
- b) The life span of a person is in danger when he has an alcoholic content in his blood of:  
(1) 3% (2) 5% (3) 6% (4) 7%
- c) The principal effect of alcohol upon an individual is a/an (1) stimulant (2) gaiety (3) medicinal aid (4) depressant

B. Subjective

1. Essay

- a) What is Cancer?
- b) Does smoking cause cancer? Explain
- c) Explain the treatment given to narcotic addicts at the two federal narcotic hospitals.
- d) Explain how a drug is determined a narcotic.

C. Teacher Observation

1. Class participation

- a) Oral reports
- b) Discussion
- c) Written reports
- d) Progress in subject matter

2. Comprehension of subject matter

- a) Do the students have an understanding of tobacco and the effects of nicotine?
- b) Do the students understand the effects of alcohol on body processes?

- c) Do the students have a better understanding of the causes of drug addiction?
- d) Did the students have an opportunity to discuss their views on these problems?
- e) Do the students have a desirable attitude concerning the health problems involved?

## VI. Materials and Resources

### A. Bibliography

#### 1. Teacher references

- a) Anderson, Langton, Health Principles and Practices, V. Mosley Company, St. Louis, 1961, pp. 217-225.
- b) Barnett, Arthur L., Shaw, John H., Effective School Health Education, Appleton-Century Crafts Inc., New York, 1959, pp. 378-389.
- c) Bauer, W. W., Your Health Today, Harper and Brothers, New York, 1955, pp. 464-470.
- d) Brace, David K., Health and Physical Education, A. S. Barnes and Company, New York, 1952, pp. 80-85.
- e) Byrd, Oliver, Textbook of College Hygiene, W. B. Saunders Company, Philadelphia, 1957, pp. 220-221.
- f) Latchaw, Marjorie, and Brown, Camille, The Evaluation Process in Health Education, Physical Education, and Recreation, Prentice Hall Inc., Englewood Cliffs, N. J., 1962, pp. 216-231.

#### 2. Student references

- a) Anslinger, J. H., and Tompkins, William, The Traffic in Narcotics, Funk and Wagnalla Company, New York, 1953, pp. 223-263.
- b) Backwalter, J. A., Merchants of Misery, Narcotics Education Inc., Washington D. C., 1961, pp. 31-35.
- c) McCarthy, Raymond G., Teenagers and Alcohol, Yale Center of Alcohol Studies, New Haven, 1956.
- d) Otto, J. M., Julian, C. J., and Tether, E. J., Modern Health, Henry Holt Company, New York, 1959, pp. 117-129.

## B. Films

1. Tobacco and the Human Body, Bureau of Audio-Visual Instruction, Extension Division, University of Nebraska, \$150, 15 minutes.
2. Cancer, obtained from same as above, 12 minutes, \$2.00.
3. Tobacco and the Human Body, Catalog of Educational Films, University of Illinois, \$2.00, 11 minutes.
4. Drug Addiction, Audio-Visual Center, Division of University Relations, Florida State University, Tallahassee, Florida, \$3.25 rent, 22 minutes, black and white.
5. Should You Drink?, McGraw-Hill Book Company, Test Film Department, 330 West 42nd St., New York 36, New York, 21 minutes.

## C. Pamphlets

1. Alcohol Educational Packet, Licensed Beverage Industries Inc., 155 East 44th Street, New York 17, New York. A collection of pamphlets, reprints, and survey studies on the topic of alcohol in education.
2. Alcoholism, The National Council on Alcoholism, New York Academy of Medicine, New York 29, New York.
3. Exploring Alcohol Question, Raymond G. McCarthy, Yale Center of Alcohol Studies, New Haven, Connecticut. A series of six pamphlets: Exploring Alcohol; Action of Alcohol on the body; American Attitudes Toward Drinking; Alcohol and Highway Safety; Alcoholism and the Alcoholic; Topics for Further Study.



## UNIT VI DISEASES

### I. Statement of Significance

- A. The purpose of this Unit is to acquaint the students with the types of germs and infection that are harmful to mankind. The students should also be given an opportunity to learn about communicable diseases and chronic diseases so that they may better understand what causes sickness and death. The students should also be given an opportunity to learn about resistance and immunity to disease and how they have developed.

### II. Objectives

- A. Subject: Germs and Infection
  - 1. To gain knowledge of bacteria with relation to spreading of germs and infection
  - 2. To understand how careless personal practice helps to spread infection and germs
- B. Subject: Resistance and Immunity
  - 1. To give an understanding of bacteria; kinds, hosts
  - 2. To understand what resistance and immunity are, and how they work
- C. Subject: Major Communicable Diseases
  - 1. To present a brief background of the different types of communicable diseases
  - 2. To explain the process of prevention and controlling of communicable diseases
- D. Subject: Chronic Diseases
  - 1. To become familiar with the types and cause of these chronic diseases
  - 2. To recognize the symptoms or danger signals for these diseases

### III. Outline of Content

- A. Subject: Germs and Infections
  - 1. Germs
    - a) Made up of tiny plant and animal forms
    - b) Germ plants are called bacteria
    - c) Germ animals are called protozoa
  - 2. Entrance of germs to body
    - a) Through the mouth; eating and drinking
    - b) Through the nose; air we breathe
    - c) Through breaks in skin caused by cuts
      - (1) Germs on the object
      - (2) From poor cleaning of the wounds

3. Growth of germs
  - a) Grow best in warm, dark, and moist places
  - b) Divides into halves and each half divides into half and so on
    - (1) Can grow to full size and reproduce every twenty minutes
4. Various sizes and shapes of germs
  - a) Coccus bacteria cells are fastened together in string-like beads
  - b) Bacillus bacteria cells are shaped like rods
  - c) Twisted rods and spiral forms make up spirillum bacteria
5. Ways bacteria help
  - a) Bacteria helps make some of our foods
  - b) Some wonder drugs come from mold growth
  - c) It causes decay of leaves, dead trees, birds, and animals which form substances in soil which are needed for growth of new plants
6. Harmful bacteria
  - a) Those which cause disease to man
    - (1) These bacteria are called disease germs
  - b) Fewer number of these than the helpful bacteria
7. Viruses
  - a) Some multiple by binary fission
  - b) Can pass through filters that hold back bacteria
  - c) Can not live actively except in living cell
  - d) Some of our most common infections such as colds, measles, mumps, smallpox, chickenpox, and rabies are caused by viruses
8. Protozoa
  - a) Much larger than bacteria but still microscopic
  - b) They are one-celled animals
  - c) They act same way as bacteria but different in appearance
  - d) They can move freely like other animals
9. How germs are spread
  - a) Air-borne
  - b) Water-borne
  - c) Food-borne
  - d) Insect-borne
  - e) Through contact
    - (1) Direct
    - (2) Indirect
- B. Subject: Resistance and Immunity
  1. History of Bacteria

- a) Leeuwenhoek
- b) Pasteur
- c) Lister

## 2. Types of Bacteria

- a) Saprophytic (other helpful bacteria)
  - (1) Action of yeast in the dough makes it more digestible
  - (2) Bacteria grow on dead substances and change them into chemical compounds which are useful to plant growth
  - (3) Micro-organisms, including bacteria, are responsible for nitrogen fixation of the air, thus giving nutrition to plants
- b) Pathogenic (dangerous to humans)
  - (1) Small in number compared to other bacteria
  - (2) Pathogenic bacteria destroy the tissue on which they live
  - (3) Another danger lies in the waste and dead bodies of these bacteria
  - (4) Toxins from these bacteria act as a poison to the whole body

## 3. Forms of bacteria

- a) There are three forms of bacteria
  - (1) Round (coccus)
  - (2) Rod (bacillus)
  - (3) Spiral (Spirillum)

## 4. Growth of bacteria

- a) Bacteria multiply by fission on simple cell division
- b) Some reproduce as quickly as every twenty minutes
- c) They must have the right kinds of conditions to multiply
  - (1) Temperature
  - (2) Moisture
  - (3) Right kinds of food
- d) The pathogenic bacteria enter the body in several ways
  - (1) Mouth
  - (2) Nose
  - (3) Mucous membranes
  - (4) The broken skin
- e) They enter the stomach and intestines in water and food; they penetrate the skin through injuries and insect bites; and they invade the mucous membranes by kissing and sexual intercourse



- f) Most bacteria enter body by means of secretions from nose and throat passing from one person to another
  - (1) A child sharing a bite of his candy bar or drink of soda pop
  - (2) Sneezing and coughing in front of others
- g) Some bacteria live in the body and do not harm unless body resistance goes down by such things as local irritations, fatigue, heat, cold, hunger or thirst
- h) There is another harmful micro-organism known as a virus
  - (1) They are too small to see with our best microscopes
  - (2) Some diseases that they cause are:
    - (a) Smallpox
    - (b) Rabies
    - (c) Yellow fever
    - (d) Infantile paralysis
    - (e) Mumps
    - (f) Measles
- i) The period which elapses between the time the bacteria enter the body and that which symptoms or signs of disease appear is called incubation
  - (1) This time varies in the same disease and also in different diseases
  - (2) The disease is usually not contagious during this period
- j) Immunity is that condition existing in the body which protects it against certain diseases
  - (1) Brought about by substances known as immune bodies or anti-bodies
  - (2) Two types of immunity--natural or inborn-acquired
  - (3) Natural immunity manifests itself in three ways
    - (a) Certain species are immune to certain diseases
    - (b) Certain races are immune to certain diseases
    - (c) Certain tissues of the body show resistance to certain bacteria
  - (4) Acquired immunity may be termed active by
    - (a) Having had the disease

- (b) Slight infection from repeated exposure to a disease
    - (c) Use of dead bacteria, attenuated viruses and toxins
  - (5) It is termed passive immunity when it is acquired through inoculation of serums or vaccines
    - (a) Serum being made from blood of an individual or animal immune to a certain disease
    - (b) Vaccine is a preparation made, killed, or weakened bacteria or viruses
  - (6) When pathogenic bacteria enter the body, a number of things happen
    - (a) Leukocytes (white corpuscles) increase in number of fight bacteria
    - (b) Special substances form in blood called antibodies which may bring immunity
    - (c) Leukocytes attack bacteria
  - (7) A person is susceptible if he lacks sufficient quantity of antibodies in his blood or has a lack of resistance
  - (8) He is said to be immune if he has necessary amounts of the above
    - (a) If he has these at birth it is known as natural immunity
    - (b) He generally acquires immunity after an attack of the disease and his antibodies are formed then
  - (9) Immunity to diseases by laboratory methods may be taken by mouth or inoculation. Again serum and vaccine are the most important
- C. Subject: Major Communicable Diseases
1. Bacteria as a foundation of disease
    - a) Classified in three groups
      - (1) Bacilli (rod-shaped forms)
      - (2) Cocci (cork-screw-like forms)
      - (3) Spirilla (cork-screw-like forms)
    - b) Stages of bacterial infection
      - (1) Entrances of bacteria into the tissues
      - (2) Incubation
      - (3) Rapid growth
      - (4) Production of toxin
      - (5) Increase in number of white blood cells
      - (6) Production of antibodies and antitoxins
      - (7) Acquired active immunity following recovery

## 2. Specific Communicable diseases

### a) Tuberculosis

- (1) Leading cause of death in ages 18-35
- (2) Caused by a bacteria called bacillus
- (3) Was discovered by Robert Koch
- (4) The disease is transmitted by those sick
- (5) The diseased are sent to sanitariums

## 3. Prevention of tuberculosis

- a) Chest x-rays of lungs are considered an important aid in diagnosing T. B.
- b) It has been recommended that everyone over 18 years old have an annual chest x-ray
- c) At present, mobile x-ray units are used to screen large groups of the population

## 4. Tuberculin tests

### a) Two types

- (1) Mantoux-injection of a drop of germ-free liquid into the outer layers of the skin
- (2) Vollmer Patch test-taping a patch containing tuberculin against the skin

### b) Tests show if person is negative and non-reactor or positive and a reactor

- (1) Negative-reattention is not needed at that time. shows that no tuberculin bacilli is present in the body
- (2) Positive reaction indicates that germ has entered the body at one time or another

### c) Treatment

- (1) Chemotherapy (use of drugs)
- (2) Prevention, detection and early treatment
- (3) Vaccine

## 5. Scarlet Fever

- a) Caused by bacteria called streptococci
- b) Scarlet rash accompanies sore throat
- c) Germs are carried by droplets of moisture and dust particles in the air
- d) Prevention of scarlet fever
  - (1) Must be detected early
  - (2) Penicillin is an effective drug in scarlet fever

## 6. Pneumonia

### a) Different types of pneumonia

- (1) Bronchial pneumonia
  - (a) Affects bronchial tubes in the lungs
  - (b) Develops from neglected upper respiratory infection



- (2) Lobar pneumonia
    - (a) Affects the entire section of the lobe of the lung
    - (b) Develops from a bacterial infection
  - b) Pneumonia develops when the body's resistance is low
  - c) Symptoms of pneumonia
    - (1) Fever
    - (2) Chills
    - (3) Cough
    - (4) Pain in the chest
  - d) Effective treatment depends upon early treatment
- 7. Poliomyelitis or Infantile Paralysis
  - a) Caused by parasites known as viruses
    - (1) Affects persons of all ages
    - (2) The polio virus, in its most dangerous form, destroys the nerve cells
    - (3) May be mild case, or may result in serious handicaps
  - b) Vaccine for polio
    - (1) Discovered by Dr. Jonas Salk in 1953
    - (2) Called Salk vaccine
    - (3) Series of three vaccines, one for each of the viruses thought to cause polio
- 8. Common cold
  - a) Most widespread infectious disease
  - b) Chief danger is that it lowers body resistance and leads to secondary infections
  - c) No vaccine to prevent the common cold
  - d) Best safeguard against cold is:
    - (1) Good health
    - (2) Stay away from places where virus is passed
  - e) Treatment
    - (1) Plenty of bed rest
    - (2) Plenty of liquids
    - (3) Consult physician
- 9. Measles
  - a) Caused by a virus
  - b) Two types of measles
    - (1) German measles
      - (a) Less severe in youth
      - (b) Considered dangerous in expectant mothers
    - (2) Rubeola
      - (a) Considered serious in children under five
  - c) May be protected against measles with the injection of antibodies
    - (1) Called passive immunity

- d) Immunity is not developed after an attack
  - e) Today we have a vaccine for measles
10. Influenza
- a) Different types of influenza are caused by different types of viruses
  - b) Spreads mainly through nose and throat discharges of infected people
  - c) Symptoms
    - (1) Sore throat
    - (2) Cough
    - (3) Chills
    - (4) Fever
    - (5) Aching of muscles and joints
  - d) Treatment
    - (1) Rest in bed
    - (2) Careful treatment
    - (3) Consult a physician
11. Chicken Pox
- a) Caused by a virus
  - b) Transmitted directly or indirectly
    - (1) From one person to another
    - (2) Through articles contaminated by discharges from skin, nose and throat
  - c) Infected person has eruptions of the skin
    - (1) Should not scratch or break
    - (2) Causes scars
  - d) No vaccine available
  - e) Should consult a doctor
  - f) Immunity is developed after one attack
12. Mumps
- a) Caused by a virus
  - b) Produces a painful swelling in the salivary glands on each side of jaw
    - (1) Regarded by doctors as being in the experimental stage
    - (2) Consult a physician as to the use of the vaccine
  - d) Mumps may be more serious to adults than children
  - e) When exposed to mumps, consult your doctor
13. The help of the community in controlling community diseases
- a) Keep their families in good health
  - b) Have a physical examination periodically
  - c) Community should provide health clinics for the required vaccines
  - d) Consulting the doctor when the symptoms of disease is evident

## D. Subject: Chronic Diseases

### 1. Arthritis

- a) Types of arthritis
  - (1) Rheumatoid arthritis
    - (a) The most serious type
    - (b) Most prevalent in people whose health is under par
  - (2) Osteoarthritis
    - (a) Involves a severe breakdown in the weightbearing joints
    - (b) Most common in older people
  - (3) Gout
    - (a) Associated with a chemical disturbance in the body
    - (b) Largely a disease of men
  - (4) Infectious arthritis
    - (a) Brought on by various diseases and may destroy the tissues of the joints
- b) Symptoms of arthritis
  - (1) Pain
  - (2) Swelling
  - (3) Stiffness and deformity in the joints
- c) The occurrence of arthritis
  - (1) Women are three times more susceptible than men
  - (2) In suffering and economic loss it takes the greatest toll of all chronic diseases
  - (3) Affects nearly eight million people and cripples more than any other disease
- d) The prevention and treatment of arthritis
  - (1) Maintain general health over the years by proper diet, rest, and exercise
  - (2) Eliminate sources of poison such as diseased tonsils, abscessed teeth, etc.
  - (3) There is no cure but Acth and Cortisone are helpful in treating arthritis and bringing it under control

### 2. Cancer

- a) Types of cancer
  - (1) Precancers
    - (a) Harmless tissue changes which have a tendency to become cancerous
  - (2) Benign or harmless tumors
    - (a) Unusual cell growth, usually not dangerous



- (3) Malignant or cancerous tumors
  - (a) Cells that break the rules of normal growth and endanger life
- (4) Hodgkin's disease
  - (a) A malignancy that causes an enlargement of the lymphatic glands
- (5) Leukemia
  - (a) The tremendous increase in the number of white blood corpuscles
- b) The cause of cancer
  - (1) Chronic or prolonged irritation
    - (a) Chemical
    - (b) Thermal (heat)
    - (c) Mechanical (friction)
  - (2) Excessive exposure to radiation
  - (3) Viruses may cause cancer
- c) The danger signals for cancer
  - (1) Any sore that does not heal
  - (2) A lump or thickening in the breast or elsewhere
  - (3) Unusual bleeding or discharge
  - (4) Any change in a wart or mole
  - (5) Persistent indigestion or difficulty swallowing
  - (6) Persistent hoarseness or cough
- d) Is cancer contagious?
  - (1) Cancer is not contagious and it is safe to come in contact with people who have the disease
- e) How is cancer diagnosed?
  - (1) X-ray photography is used to detect neoplasms of lung, gastrointestinal tract, kidneys and brain
  - (2) Endoscopic instruments
    - (a) Tubes inserted into area to be studied illuminating tissue with tiny bulb
  - (3) Biopsy
    - (a) Tissue is removed and examined under microscope to determine whether or not it is malignant
  - (4) Cell smear tests
- f) The types of cancer treatment
  - (1) Surgery
    - (a) Most useful when the tumor is localized and has not spread
  - (2) X-ray
    - (a) Best used for certain parts of the body

- (3) Radium
  - (4) Hormones and chemicals as a means of prolonging life
3. Heart Disease
- a) Types of heart disease
    - (1) Rheumatic heart disease
      - (a) Attacks the tissues of the heart
    - (2) High blood pressure
      - (a) Caused by extra resistance to the passage of blood in the arteries
    - (3) Coronary Heart disease
      - (a) Caused by a thickening of the coronary arteries
      - (b) A heart attack occurs when a blood clot closes one of these arteries
    - (4) Almost any infectious disease can affect the heart
      - (a) Rheumatic fever
      - (b) Syphilis
  - b) The symptoms of heart disease
    - (1) Shortness of breath on exertion
    - (2) Shortness of breath upon awakening at night
    - (3) Swelling of the ankles may indicate poor circulation because of heart disease
    - (4) Pain over the heart or in the middle of the chest
    - (5) Dizziness, fainting spells, blue lips, and extreme fatigue
  - c) The occurrence of heart disease
    - (1) It is the leading killer of people of all ages
    - (2) The second major killing disease for students of college age
    - (3) More men than women suffer from heart diseases
    - (4) 900,000 Americans die each year from diseases of the heart and blood vessels
  - d) Effects of smoking on heart disease
    - (1) Heart rate and blood pressure are increased by smoking
    - (2) Smoking causes spasms or contractions of the small blood vessels in the extremities

- (3) This leads to Buerger's disease
  - (a) Gangrene can set in resulting in the loss of fingers, toes, etc.
- e) The causes of heart disease
  - (1) Hardening of the arteries
  - (2) Obesity
  - (3) Physical inactivity
  - (4) Emotional strains
  - (5) Hereditary factors and the endocrines are also involved
- f) The techniques of treating heart disease
  - (1) Some forms of heart disease can be prevented and a few can be cured
  - (2) All heart cases can be cared for best if diagnosed early
  - (3) Almost every heart condition can be helped by proper treatment
    - (a) Prolonged rest
    - (b) Keep weight down
    - (c) Stop smoking
    - (d) Proper diet
    - (e) Surgery

#### IV. Activities

##### A. Introductory

1. Describe each student's exposure to germs and infection each day
2. Show a film on germs and infection
3. Have students make a list for discussion of some communicable diseases
4. Have students list chronic diseases for discussion
5. Ask the students what vaccines Salk and Sabin are responsible for developing

##### B. Developmental

1. Assign reports on various diseases
2. Discuss routes of infection
3. Discuss students reports
4. Discuss the functions of the local health unit
5. Discuss the State Health Department's functions
6. Describe the functions of the United States Public Health Service
7. Discuss ways of becoming infected by a disease
8. Discuss the major communicable diseases
9. Assign reports on the development of vaccines
10. Discuss immunizations and the current research in the field



## C. Culminating

1. Arrange for a Health Department representative to speak
2. Discuss desirable health habits that will help control disease
3. Discuss student's questions and summarize the unit

## V. Evaluation

## A. Objective tests

## 1. True-False

- a) Bacteria grow best in warm, dark, and dry places. False
- b) Bacteria may be both helpful and harmful. True
- c) There are many animals which cause disease. False
- d) Pasteur is known as the father of bacteriology. True
- e) Another name for the bacillus bacteria is the spiral bacteria. False

## 2. Completion

- a) The two types of measles are German and Rubeola.
- b) The three types of bacteria are cocci, spirilla, and baccilli.
- c) Dr. Salk discovered a vaccine for polio.

## 3. Multiple Choice

- a) Which of the following is the serious type of arthritis?
  - (1) Infectious arthritis
  - (2) Osteoarthritis
  - (3) Rheumatoid arthritis
- b) Which of the following statements concerning arthritis is false?
  - (1) Arthritis is a serious economic problem.
  - (2) The most crippling form of arthritis begins after 40 years.
  - (3) Women are more susceptible to arthritis than men.
- c) Which of the following is proper treatment for heart disease?
 

(1) Anti-toxin vaccine	(3) Barbituates
(2) <u>Rest</u>	(4) Early return to work

## B. Subjective test

## 1. Essay

- a) What are some of the danger signals of cancer?

- b) Outline the danger points of rheumatic fever.
- c) What is the difference between communicable and chronic diseases?
- d) What are the four methods of contracting a disease?

#### C. Teacher Observation

- 1. Class participation
  - a) Oral reports
  - b) Written reports
  - c) Discussion participation
  - d) Progress in study skills
- 2. Subject matter understanding
  - a) Do students understand how germs are spread?
  - b) Have the students developed desirable attitudes concerning the spread of germs?
  - c) Do the students have an understanding of the types of immunity?
  - d) Do the students know the symptoms of communicable diseases?

### VI. Materials and Resources

#### A. Bibliography

##### 1. Teacher references

- a) Anderson, C. L., and Langton, C. V., Health Principles and Practice, C. V. Mosley Company, St. Louis, Missouri, 1961.
- b) Bauer, W. W., Shacter, Helen, About All of Us, Scott Foresman and Company, Chicago, 1962, pp. 27-52.
- c) Bolton, William W., Foster, Julia C., and Nicoll, James S., Your Health Today and Tomorrow, Laidlow Brothers, Dallas, 1960, pp. 183-193.
- d) Burkard, William E., Maroney, Frederick W., You & Your Health, Lyons and Garnahan, Chicago, 1958, pp. 106-130.
- e) Diehl, Harold S., Textbook of Healthful Living, Mc-Graw-Hill Book Company, New York, 1960, pp. 29-45.

##### 2. Student references

- a) Cameron, Charles S., The Truth About Cancer, Prentice-Hall, Englewood Cliffs, N. J., 1956.
- b) Davis and Southworth, Meredith's Hygiene, Blakiston Company, New York and Toronto, 1954, pp. 185-210.
- c) Hickman, Cleveland P., Physiological Hygiene, Prentice-Hall Inc., New York, 1940, pp. 358-59.
- d) Kirkpatrick, Bruce T., and Huettner, Alrich F., Fundamentals of Helpful Living, Ginn and Company, New York, 1931, pp. 462-490.

- e) Little, Clarence C., M. D., Civilization Against Cancer, Farrar and Rinehart, Inc., New York, 1939.
- f) Otto, James H., Julian, C. J., and Tether, J., Modern Health, Henry Holt and Company, New York, 1959, pp. 370-388, 310-311.

B. Films

1. Bacteria-Friend and Foe, University of Illinois, Visual Aid-See Service, Champaign, Illinois, 11 minutes, color, \$3.65 to rent.
2. Body Defense Against Diseases, Oregon St., Septem of Higher Education, Carvallis, Sound 16 mm, 11 minutes, black and white, \$1.50 fee.
3. T. B. Why Does It Strike? Division of Health of Missouri, Jefferson City, Missouri, 21 min., adult and adolescence, black and white, free.
4. Stop Rheumatic Fever, American Heart Association, 12 minutes, black and white, \$4.50.
5. The Doctor Speaks His Mind, American Cancer Society, 521 West 57th St., New York, 16 minutes, black and white, \$5.75.



UNIT VII  
ACCIDENTS--FIRST AID--TREATMENT

I. Statement of Significance

- A. This Unit is presented to give the students an opportunity to develop good attitudes concerning safety practices. The proper first aid procedures will be discussed and practiced in order to help prepare the students for possible use in emergencies.

II. Objectives

- A. Subject: Accident Hazards and Safe Living
1. To learn the preventive measures against accident hazards
  2. To understand the purposes of safety education
- B. Subject: First Aid
1. To develop skills and attitudes for emergencies
  2. To help the students become aware of how to prevent accidents
- C. Subject: You and Your Doctor
1. To create a better understanding of the physician and his relationship to the patient
  2. To emphasize the importance of serious consideration when a person selects a physician

III. Outline of Content

- A. Subject: Accident Hazards and Safe Living
1. Accidents
    - a) Kill more children in the United States each year than the next three leading causes of death combined
    - b) According to the National Safety Council, in 1964 home accidents took the lives of 6,200 children under four
  2. Death and injury rates (In accordance with year)
  3. Safety prone individual
    - a) Easy to get along with, enjoys friendships, and is helpful
    - b) Has happy family relations
    - c) Pays attention to details and is facile at remembering
    - d) Likes his work and is ambitious for promotion
    - e) Health is better than average, and is conscious of those things which promote his health

- f) Emotional stable and tolerate
  - g) Has excellent space-time awareness--knows what he is doing, where he is and when
  - h) Does not allow his attention to shift
  - i) Superior to vision, hearing, reaction time, and muscle tone
4. Chief causes of automobile accidents
- a) Speed
    - (1) One out of three serious accidents is due to unsafe speed
  - b) Alcohol
    - (1) Drinking driver or drinking pedestrian is involved in one out of four or five accidents
  - c) Physical defects
    - (1) Anything which affects physical condition of driver
  - d) Violation of traffic laws
    - (1) Statistics show that in two out of three fatal accidents involving two cars someone was breaking the law
  - e) Obstruction to clear vision
    - (1) Such factors as weather conditions
    - (2) About one fifth of all accidents are attributed to such accidents
  - f) Road road conditions and darkness
    - (1) 75% of fatal accidents occur at night
  - g) Defective cars
    - (1) Defective cars account for 5 to 10 percent of car accidents
5. Guides to safe driving
- a) Check condition of car
  - b) Driver's license
  - c) Know local traffic ordinances
  - d) Strictly obey all traffic rules
  - e) Passing cars
    - (1) Don't pass on curves or hills
    - (2) Pass on level, straight roads with clear vision ahead and behind
  - f) Make correct signals
  - g) Be courteous
  - h) Back out slowly and be sure way is clear
  - i) Pulling away from parking position
    - (1) Be sure that each step of process is safe

- j) Slow down when passing an intersection
  - k) Distance from car ahead
    - (1) Drive far enough behind car ahead that you can stop safely when necessary
  - l) Pull in on a busy highway only when all is clear
  - m) Pulling off onto side or shoulder of road
    - (1) Cut speed and signal intention to car behind
  - n) Turn wheels in same direction car is skidding and pump brakes gently
  - o) Parking on incline
    - (1) Turn wheels at angle toward curb
  - p) Your physical condition on long drives should be above par
  - q) Avoid highway hypnosis
  - r) Keep alert while driving
  - s) Reduce normal driving speed during night driving
6. Accidents in the home
- a) Falls
    - (1) Constitute half of all accidents in the home
    - (2) Chief causes are poor illumination of stairways and steps, lack of railing to hold to, loose and slippery steps, highly waxed floors, non-gripping rugs, etc.
  - b) Fire
    - (1) Causes are defective wiring and electrical equipment, careless disposal of cigarettes and matches, overheated stoves and heaters, spontaneous ignition, gas and other explosions, and lightning
7. Bicycle hazard
- a) 21,000 bicycles on streets and highways of country
  - b) 600 to 700 lives a year, most of them boys five to nineteen years of age
  - c) Collision with motor cars accounts for four-fifths of the accidents
  - d) Accident hazards include riding double, failure to give proper signals, weaving bicycle too far away from curb, and failure to carry parcels in basket fastened to handle bars



8. Athletic accidents
  - a) Competitive sports are greatest offenders, driven by intense desire to win
  - b) Sports in which there is body contact produce many injuries under the heat of competition
  - c) Accident rate is higher among inexperienced players, players with poor and improper equipment, player not properly conditioned, and those who are kept in the game when they are too fatigued to continue
9. Aquatic accidents
  - a) Less likely to occur if one is skilled in handling boats and canoes, knows skills of swimming and diving, knows where these skills can be practiced safely, and is trained in techniques of water rescue
10. Firearms hazard
  - a) Less likely to occur if one possesses skill in handling firearms and never points a gun at another person when on a hunting trip or elsewhere
11. Occupational accidents
  - a) Less likely to occur when employee is adequately trained and proficient in skills of his trade and is protected from dangers, including falls
- B. Subject: First Aid
  1. Introduction of First Aid
    - a) Definition of First Aid
    - b) General principles of First Aid
  2. Areas to include in course
    - a) Wounds
      - (1) Definition of wounds
      - (2) Classification of wounds
        - (a) Incised
        - (b) Lacerations
        - (c) Abrasions
        - (d) Punctures
      - (3) First aid for wounds
        - (a) To prevent infection
        - (b) Signs of infection
      - (4) Special wounds
        - (a) Animal bites
        - (b) Snake bites

- b) Severe bleeding
  - (1) Methods to control bleeding
    - (a) Direct pressure
    - (b) Hand or finger pressure on the bone underlying an artery
    - (c) Tourniquet
  - (2) Pressure points
- c) Shock
  - (1) Explain shock
  - (2) Causes of shock
  - (3) Signs and symptoms
  - (4) Treatment for shock
- d) Asphyxiation emergencies
  - (1) Types
    - (a) Drowning
    - (b) Electric shock
    - (c) Suffocation
  - (2) Symptoms of asphyxiation
  - (3) First aid treatment
- e) Artificial Respiration
  - (1) Methods used
    - (a) Mouth to mouth
    - (b) Back pressure arm lift
    - (c) Small children and infants
  - (2) Uses of artificial respiration
- f) Poisons
  - (1) Causes and prevention
  - (2) Types of poisoning
  - (3) Signs and symptoms
  - (4) First aid treatment
    - (a) Acid poison
    - (b) Alkaline poison
- g) Injuries due from heat and cold
  - (1) Burns
    - (a) Classified by degree
    - (b) First aid treatment
  - (2) Heat exhaustion and sunstroke
    - (a) Signs of heat exhaustion and sunstroke
    - (b) First aid and treatment
  - (3) Frostbite
    - (a) Signs of frostbite
    - (b) First aid treatment
    - (c) Effects

## h) Injuries to bones, joints and muscles

## (1) Fractures

- (a) Single fracture
- (b) Compound fracture
- (c) Comminuted fracture
- (d) Spinal fractures
- (e) First aid treatment

## (2) Sprains, strains, and bruises

- (a) Cause of injury
- (b) First aid treatment

## (3) Dislocations

- (a) Cause of injury
- (b) First aid treatment

## i) Accessories to use in first aid

## (1) Bandages

- (a) Triangular
- (b) Roller
- (c) Carvat
- (d) Four-tailed
- (e) Muslin binder

## (2) Dressing

## (3) Splints

## C. Subject: You and Your Doctor

## 1. How to select a physician in case of emergency

- a) Information service of the telephone
- b) City Hospital, City or County Health Department
- c) Ask for Physician's Emergency Service

## 2. Steps in selection of a permanent physician

- a) Consult someone in a position to know the doctors of your community
  - (1) Friend or relative in medical profession
  - (2) Manner of your local hospital
  - (3) Local board of health
  - (4) Community of school nurse
- b) By collecting a list of those doctors that appear most desirable then visiting them for routine check-ups
- c) Base your selection of a physician on his training, experience, personality, and character interest and frankness

## 3. Vaccination against quackery

- a) Methods of a quack
  - (1) Advertises special or secret methods of cure
  - (2) Claims ability to cure serious ailments easily and quickly



- (3) Does not remain long enough to assume full responsibility for results of treatments given
- b) The evil of quackery has cost the United States thousands of lives and as much as a billion dollars a year
- 4. When is it necessary to contact your doctor
  - a) Pain
  - b) Fatigue
  - c) Weight change
  - d) Headache
  - e) Fever
  - f) Bleeding
  - g) Indigestion
  - h) Insomnia
  - i) Skin change
  - j) Personality changes
  - k) Sore throat
  - l) Coughing
  - m) Swelling
  - n) Lumps
  - o) Loss of appetite
- 5. Medical expenses
  - a) The total private spending in 1964 was 19.8 billion dollars
  - b) Per capital expenditures was \$113.50 for each civilian
  - c) Ethical physician renders service before his bill
  - d) Drugs-prescriptions
- 6. Kinds of treatment
  - a) Surgery
  - b) Drugs
  - c) Physical medicine
  - d) Psychotherapy
  - e) Regimen
- 7. Other resources available for the protection of your health
  - a) Pharmacies
  - b) Nurses
  - c) Hospitals
  - d) Dentists
  - e) X-ray technologists
- 8. Government and Voluntary Health Agencies
  - a) Local, State, and National Health Agencies
    - (1) Functions of Local Health Board

- (a) Regulation of water and sewage facilities
- (b) Control contagious diseases
- (c) Supervise milk and milk products sold in community
- (d) Inspect public eating places
- (e) Keep records and statistics
- (f) Promote programs for disseminating health education in the community
- (2) Functions of the State Board of Health
  - (a) Collecting vital statistics
  - (b) Sanitation, dairy products, and food and drugs
  - (c) Laboratory testing of water, sewage, and dairy products
  - (d) Control of contagious diseases, medicine, maternal and child health, diseases of old age
  - (e) Public health nursing, industrial hygiene, hospital services, administration of local health service

#### IV. Activities

##### A. Introductory

1. Describe current accidents by showing students recent newspaper accounts
2. Have each student illustrate the conditions in an accident and then ask the rest of the audience what to do
3. Have the students list the things they expect from their doctor

##### B. Developmental

1. Illustrate first aid principles
2. Have students team up and work on the techniques
3. Discuss first aid for burns in the home
4. Discuss how to stop bleeding
5. Discuss the procedure in reporting accidents
6. Discuss the techniques of artificial respiration
7. Discuss the first aid procedures for snake bites
8. Assign each student a class project on some aspect of first aid
  - a) Apply leg splints
  - b) Treat for shock
  - c) Stop arterial bleeding
  - d) Remove a splinter

- e) Treat for burns
- f) Apply bandages at various locations
- g) Remove an object from the throat
- 9. Discuss the method of choosing a doctor
- 10. Discuss qualifications for licensing doctors
- C. Culminating
  - 1. Have a highway patrolman discuss motor vehicle accidents
  - 2. Have students prepare a notebook of newspaper clippings with four classes of accidents
    - a) Home
    - b) Work
    - c) Public (Non-motor vehicle)
    - d) Motor vehicle

## V. Evaluation

### A. Objective Tests

#### 1. True-False

- a) Motor vehicle accidents claim 50,000 lives each year. True
- b) A second degree burn is characterized by charred flesh. False
- c) It takes about two ounces of water in the lung to cause asphyxiation. True
- d) Immediate and temporary are key words in the definition of first aid. True

#### 2. Completion

- a) A break of a bone is called a fracture.
- b) A splint is used to keep the moving part from moving.
- c) The most severe burn is classified as a third degree burn.

#### 3. Multiple Choice

- a) Which of the following is not a classification of bone fracture
  - (1) Simple      (2) Compound      (3) Complex
- b) If you are the first person at the scene of an accident, what should be the first thing to check?
  - (1) Fractures    (2) Breathing
  - (3) Bleeding    (4) Burns
- c) Spurting red blood is a sure sign of what type of bleeding
  - (1) Arterial    (2) Veinous
  - (3) Capillary    (4) Pulmonary



## B. Subjective test

### 1. Essay

- a) Who would you contact in case of emergency if an accident occurred and what would you tell them?
- b) What is first aid?
- c) What principles should be followed in administering first aid?

## C. Teacher Observation

### 1. Class participation

- a) Oral reports
- b) Written reports
- c) Discussion in class

### 2. Understanding of subject matter

- a) Have the students developed an understanding of first aid?
- b) Do the students understand the importance of safety at home, at school, at work, and while playing?
- c) Do the students understand the importance of selecting a good doctor?

## VI. Materials and Resources

### A. Bibliography

#### 1. Teacher references

- a) American Red Cross, First Aid Textbook, Doubleday and Company, New York, 1957.
- b) Bolten, William, Foster, Julia C., Nicoll, James S., Your Health Today and Tomorrow, Laidlow Brothers, Inc., River Forest, Illinois 1960, pp. 315-337.
- c) Brownell, Clifford L., Hobson, Lawrence B., Evans, Ruth, Health Sciences, American Book Company, New York, 1961, pp. 324-29
- d) Gibney, Harriet H., Accidents Don't Just Happen, Parents Magazine Enterprises, New York, 1963, p. 88.
- e) Grout, E. R., Health Teaching in Schools, W. B. Saunders Company, Philadelphia, 1958, pp. 285-316.

#### 2. Student references

- a) Brownell, Clifford L., Hobson, Lawrence B., Evans, Ruth, Health Sciences, American Book Company, 1961, pp. 324-329.

- b) Leader, Barbara, Miller, Blanche, Robinson, Milliard, O'Keefe, Patricia Ruth, Maxwell, Cyrus, Health and Safety for High School Students, John C. Winston Company, Philadelphia, 1959, pp. 234-253.
- c) Meredith, Florence L., Irwin, Leslie W., Staton, Wesley M., Health and Fitness, Boston, 1962, pp. 297-307.
- d) Otto, James H., Julian, C. J., Tether, J. E., Modern Health, Henry Holt Company, New York, 1959, pp. 442-458.

### B. Films

- 1. To See Ourselves, Health Education Services, Missouri Division of Health, State Office Building, Jefferson City, Missouri, 12 minutes, color, free.
- 2. Your Friend the Doctor, Coronet, 1950, Educational Consultants, F. V. Burkelow, D. A., Cost \$100. 10 minutes, rent through application.
- 3. First Aid On the Spot, Health Education Services, Missouri Division of Health, State Office Building, Jefferson City, Mo., 10 minutes, sound, black and white, free.

### C. Chart

- 1. Our Health and Safety, James V. Williams, Charles E. Morrill Books, Inc., Columbus 16, Ohio, 1946, 32 pages, 28 cents.

### D. Pamphlet

- 1. First Steps to First Aid, Johnson and Johnson, Mr. J. G. Hansen, Director of Consumer Relations, New Brunswick, New Jersey.

## SUMMARY

The units of this syllabus have been arranged into seven sections with the first unit being a prerequisite for the following six units. The skeletal and muscular systems should be taught first so that the students may understand the organization of the other systems of the body in relation to structural and muscular support.

The next unit covering the mind is important to the teen-age student and should be taught following the systems of the body to show the importance of a central control region in the body. The information about the brain provides a good introduction for the subject of mental illness and treatment of the mentally ill.

The unit dealing with the way we express ourselves can be developed to follow mental illness as a base for sound practices of personality and poise. The ability to develop a personality depends upon social contact in the form of verbal expression and auditory reception.

The fourth, fifth, and sixth units could be rearranged to provide for the interests of the pupils.

The last unit concerning accidents and first aid should be presented at the end of the school year as the



students tend to do more things and go more subjecting themselves to many recreational hazards. The development of desirable safety attitudes through the use of Unit VII is very important. The inclusion of first aid training in the unit provides the opportunity for many students to develop skills they may never be exposed to again.

## BIBLIOGRAPHY

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### A. BOOKS

- American Red Cross, First Aid Textbook. New York: Doubleday and Company, 1957.
- Anderson, C. L. and C. V. Langton. Health Principles and Practice. St Louis, Missouri: C. V. Mosley Company, 1961.
- Anslinger, J. H. and William Tompkins. The Traffic In Narcotics. New York: Funk and Wagnalla Company, 1953.
- Anthony, Catherine. Anatomy and Physiology. St. Louis, Missouri: C. V. Mosley Company, 1959.
- Auring, B. P. The Extremities. Philadelphia: Lea and Febiger, 1960.
- Backwalter, J. A. Merchants of Misery. Washington, D. C.: Narcotics Education Inc., 1961.
- Bacon, E. S. Your Child's Teeth. New York: E. P. Dutton and Company, 1927.
- Barboreaux, P. M. Vocal Resonance. Boston: The Christopher Publishing House, 1941.
- Barnett, Arthur L. and John H. Shaw. Effective School Health Education. New York: Appleton-Century Crafts Inc., 1959.
- Bauer, W. W. Your Health Today. New York: Harper and Brothers, 1955.
- Brace, David K. Health and Physical Education. New York: A. S. Barnes and Company, 1952.
- Brownell, Clifford L. Lawrence B. Hobson and Ruth Evans. Health Sciences. New York: American Book Company, 1961.



- Burkard, William W., and Frederick W. Maroney. You and Your Health. Chicago: Lyons and Garnahan, 1958.
- Byrd, Oliver E. Health. Philadelphia: W. B. Saunders Company, 1958.
- Cameron, Charles S. The Truth About Cancer. Englewood Cliffs, New Jersey: Prentice-Hall, 1956.
- Charters, W. W., Dean F. Smiley and Ruth W. Strong. A Sound Mind. New York: The Macmillan Company, 1947.
- Chenoweth, Laurence. School Health Problems. New York: F. S. Crafts and Company, 1939.
- Clark, R. L., and R. W. Cuzley. The Book of Health. Houston: Elsevier Press Inc., 1935.
- Curtis, Francis D. Biology In Daily Life. Chicago: Gin and Company, 1959.
- Davis and Southworth, Meredith's Hygiene. New York and Toronto: Blakiston Company, 1954.
- Diehl, Harold S. Textbook of Healthful Living. New York: McGraw-Hill Book Company, 1960.
- Dorcus, Roy M., and Wilson G. Shaffer. Textbook of Abnormal Psychology. Baltimore: Williams and Wilkins Company, 1935.
- Fait, Hollis. Health and Fitness for Modern Living. Boston: Allyn and Bacon Inc., 1961.
- Gray, Henry. Anatomy of the Human Body. Philadelphia: Lea and Febiger, 1959.
- Hartman, L. The Teeth and Mouth. New York: D. Appleton and Company, 1927.
- Hickman, Cleveland. Health for College Students. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1958.

- Holt, Rinehart, and Winston. Mental Retardation. New York: Harper and Brothers, 1962.
- Johnson, Wendell. Speech Handicapped School Children. New York: Harper and Brothers, 1954.
- Karpovic, Peter. Physiology of Muscular Activity. Philadelphia: Saunders and Company, 1959.
- Herr, James. The Fundamentals of School Health. New York: The Macmillan Company, 1959.
- Kirkpatrick, Bruce T., and Alfred F. Huettnner. Fundamentals of Health. New York: Ginn and Company, 1931.
- Latchaw, Marjorie, and Camille Brown. The Evaluation Process in Health Education, Physical Education, and Recreation. Englewood Cliffs, New Jersey: Prentice Hall Inc., 1962.
- Leader, Barbara, Blanche Miller, Williard Robinson, Patricia Ruth O'Keefe, and Cyrus Maxwell. Health and Safety for High School Students. Philadelphia: John C. Winston Company, 1959.
- Little, Clarence C., M. D. Civilization Against Cancer. New York: Farrar and Rinehart Inc., 1939.
- Maslow, A. H., and Bela Mittilmann. Principles of Abnormal Psychology. New York: Harper and Brothers, 1951.
- McCarthy, Raymond G. Teenagers and Alcohol. New Haven: Yale Center of Alcohol Studies, 1956.
- Meredith, Florence L., Leslie W. Irwin, and Wesley M. Staton. Health and Fitness. Boston: The Christopher Company, 1962.
- Millard, Nellie D., and Barry G. King. Human Anatomy and Physiology. London: W. B. Saunders Company, 1956.
- Wemir, Alma, M. D. The School Health Progress. Philadelphia and London: W. B. Saunders Company, 1959.

Nicoll, J. S., J. C. Foster, and W. W. Eoton. Your Health, Today and Tomorrow. Dallas: Laidlow Brothers, 1960.

Otto, J. H., J. Julian, and E. J. Tether. Modern Health. New York: Henry Holt Company, 1959.

Pressey, Signey, and Pressey. Mental Abnormality and Deficiency. New York: The Macmillan Company, 1926.

Sarett, L., W. T. Foster, and A. J. Sarett. Basic Principles of Speech. Boston: Houghton Mifflin Company, 1958.

Stanley, Douglas. The Science of Voice. New York: Carl Fisher Inc., 1932.

Thorpe, Louis P. The Psychology of Mental Health. New York: The Ronald Press Company, 1950.

Turner, C. E. Personal and Community Health. St. Louis, Missouri: C. V. Mosley Company, 1959.

White, Robert W. The Abnormal Personality. New York: The Ronald Press Company, 1956.

Williams, J. F. Personal Hygiene Applied. Philadelphia: W. B. Saunders Company, 1925.

Youmans, W. B. Human Physiology. New York: The Macmillan Company, 1959.



A PROPOSED SYLLABUS IN HEALTH  
FOR GRADES 9-12

by

KENNETH ROBERT CARVER

B. S., Northwest Missouri State College, 1964

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

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Today the teaching of health is aimed at the improvement of healthful living rather than just the mere mastery of facts. The tentative course of study was prepared to provide experiences and instruction for high school students to help them develop acceptable health practices, scientific and wholesome attitudes, and an understanding of sound health principles.

The writer realizes that health is so vitally a part of all living experiences that it is impossible to include all the details and materials involved in the teaching of health within the developed syllabus. It is hoped that the course outline will be useful for further reference and help to keep teachers, as instructors, aware of their role in health guidance and teaching, thus, making the school health program more effective.

The tentative syllabus was divided into seven different units, covering the areas of: Proper Food Habits, The Circulatory System, Personal Care and Hygiene, Mental Hygiene. The primary purpose was to present a guide which included topics which would fulfill the health needs and interests of the pupils in grades 9-12. Before the proposed syllabus could be effectively incorporated into the teacher's personal lesson plans, the individuality of the students would have to be considered.

The outline form of the syllabus was intended to be a guide for future research and preparation. The resources included in each unit are to provide both teacher and student with information beyond that which is usually presented in a single textbook.

The syllabus, in order to be effective, must be revised each year it is used to maintain the most current listings of information available to teach the subject of Health.