THE discovery of education as an instrument in preventive medicine . . . has proved almost as far-reaching in its results as the discovery of the germ theory of disease.” So stated Dr. C.-E. A. Winslow, one of America’s great public health statesmen. Evidence as to the truth of Dr. Winslow’s statement continues to accumulate. Education has been an important instrument in bringing about health improvement in every area in which such improvement has occurred.

The role of medical research in protecting and promoting the health of people is well known. The scientific curiosity of men and women in many countries has provided mankind with basic knowledge about health and disease. Smallpox, diphtheria, poliomyelitis and whooping cough are but a few of the diseases which have been found to be preventable. The discovery of antibiotics and other chemical substances has aided greatly in the treatment of disease. Surgical techniques and methods of medical care are constantly being improved. Man’s knowledge of the structure and function of the human body is being extended. Continued intensive research is inextricably linked with improvement in health and freedom from disease.

Yet research is only the first step toward man’s goal of health and happiness. The findings of the laboratory must be applied in useful ways. This is the task of the thousands of workers in the health professions: physicians, dentists, nurses, technicians and numerous others whose concern is the providing of health services. Hospitals, clinics and health departments are staffed with persons professionally prepared to utilize the findings of research to protect life and prevent disease. A variety of health services is available throughout the life of any individual. One thinks immediately of the health services rendered by the physician and dentist, but there are many others of importance. For example, sanitary engineers safeguard the food and water of a community and technicians prepare and test vaccines for immunization purposes. Health services are the link between the laboratory and the people who can benefit from medical research.
Despite continuing medical research and the availability of sufficient health services, limited progress can be made in promoting health unless people are willing to make use of this research and these services. Here education makes its great contribution. Parents learn the need for immunizing young children against various preventable diseases. Mothers willingly seek prenatal care.

Through health education, people have learned about such diseases as tuberculosis. They recognize the need for periodic chest X-rays, the importance of isolation of those sick with tuberculosis, and the value of rest, diet, drugs, and surgery in treating the disease. Education has influenced the attitude of people toward tuberculosis, changing feelings of despair to confidence regarding its eventual elimination. Similarly, most educated people seek medical treatment at the first sign of abnormalities which might be indicative of cancer or other serious condition, thus greatly increasing the likelihood of successfully curing the disease. Persons who have developed a positive attitude toward medical care readily seek help in cases of mental illness or alcoholism.

It is difficult to assess the exact value of health education in the school and community. Yet discussants at the plenary session of the Twelfth World Health Assembly stated, “Health education is the key to the solution of many health problems involved in the humanitarian task of the World Health Organization.” They also insisted that “Health education is the most powerful weapon we have in the field of health.” Instances were cited in which programs had succeeded because there had been effective education, and others in which programs had failed because education had been ineffective. Dr. M. G. Candau, Director General of the World Health Organization, wrote: “It is fully recognized today that no lasting progress in health work can be achieved without simultaneously undertaking to educate the population on health matters.”

Why Health Education?

Health education for children and youth helps them to better understand health problems and needs and to cooperate in prevention or treatment. Health education also helps build a foundation for intelligent parenthood and informed community membership. Children and youth who have developed respect for scientific research and a knowledge of community resources for health services can become, as adults, intelligent consumers of health products and services. They are unlikely to be influenced by unscrupulous advertisers, quacks or faddists, or to neglect preventive care for themselves and their families.

The health problems of children of elementary school age include sicknesses such as colds, chicken pox, mumps, measles and digestive disturbances and defects and disabilities such as impaired vision, impaired hearing, dental decay, emotional and nutritional problems. Accidents resulting from motor vehicles, drowning, burns, explosions and falls are the leading causes of death among this age group. Health education for children and youth must encompass their particular health needs and problems.

As with other subjects in the curriculum, health education must be related to the interests and developmental characteristics of children and youth. Thus, the emphasis in dental health in the primary grades is placed on toothbrushing and on developing favorable attitudes toward
regular dental care. Stress in the intermediate grades is placed on the need for assuming responsibility for regular visits to a dentist and understanding the function of teeth, how dental caries occurs and how dentists can help to prevent the premature loss of teeth and to maintain mouth health. Focus in the upper grades is on understanding the relation of fluorides to the prevention of decay and the structure and sequence of tooth eruption. In the high school years, interest centers on the economics of good dental health and ways in which the community, the family and the individual can maintain dental health. As a result, then, of attention to the needs, interests and developmental characteristics of children and youth, the instructional program in health can be stimulating and dynamic as well as essential to our welfare.

Scope of the Program

What is the scope of a well planned program in health education? In the primary grades, attention should be given to a number of areas such as safety and first aid, emotional and social health, nutrition and food, cleanliness, clothing, and appearance; structure, function and care of the body; the teeth and dental health, human growth, physical fitness, exercise and recreation, sleep, rest and relaxation; prevention and care of sickness; home and family living and community resources and community health. In the intermediate grades, to these areas, may be added instruction in alcohol, tobacco and drugs; and consumer education, and in the upper grades, historical highlights and health career opportunities. Thus, areas of instruction are stressed and developed in accordance with the needs and interests of boys and girls as they grow and develop.

Physical education is a related but separate subject matter area in the curriculum. Regular physical activity is essential if the body is to grow and develop fully. Participation in active sports, playing vigorously with others, is the heritage of every girl and boy. Learning the skills of sports and games appropriate to age, sex, and degree of coordination, and developing a favorable attitude toward regular physical activity are important outcomes of physical education. Instruction in health emphasizes the need for learning and enjoying a variety of activities requiring vigorous use of the body. And conversely, physical education, science and other subject matter areas of the curriculum reinforce principles of health and safety. Experienced, well-oriented teachers and administrators take advantage of the numerous opportunities afforded in all areas of the school program for correlation and integration.

Effective health teaching is much like good teaching in any other area. An attempt must be made to involve girls and boys in meaningful experiences so that attitudes and behavior are positively influenced and knowledge is increased. Today’s health education is distinctly different from the memorization of insignificant facts of anatomy and physiology which constituted the “hygiene” of earlier times.

Today’s Health Teaching

A functional approach to health education utilizes the school environment for teaching purposes and considers school health services as pupil learning experiences. It reaches out into the home and community for situations which have health significance. Modern school health education is functional and dynamic, it has breadth and depth, and it is based
on the needs and interests of boys and girls.

To illustrate this concept of health teaching, let us select one of the specific areas of health teaching listed earlier, the prevention and care of sickness. How can children and youth be helped to develop desirable attitudes toward disease, and to learn suitable behavior patterns which will protect them against disease? How can they gain the knowledge necessary to use research findings and available health services to protect themselves and their families?

It is the goal of health teaching in the primary grades to form and reinforce desirable habits and attitudes toward the prevention of disease. Parents and teachers work together to achieve these ends. No attempt need be made at this level to teach specific facts about disease. Children are helped to reinforce such desirable habits as washing hands before eating and after going to the toilet, covering mouth and nose when coughing or sneezing, reporting feelings of illness to parent or teacher and keeping foreign objects out of the mouth. Children are helped to develop favorable attitudes toward staying home when sick, regular visits to the doctor and the need for preventive immunization treatments. They learn to express sympathy for those who are sick and to cooperate with health personnel in receiving treatment. Real life situations at home and at school offer many opportunities for discussions and practices which will establish desirable attitudes and habits.

In the intermediate grades, children are full of questions about health and disease. They want to know the “why” and “wherefore” of recommended practices. They are ready to learn how germs grow and how they are spread from one person to another. They gain appreciation of the scientific method in the study of disease and become familiar with the role of the health professions and health organizations in fighting disease. They discover, for example, how food and water are protected by public health authorities.

A variety of teaching methods may be employed in the intermediate grades. Children may view stained slides of bacteria through a microscope. Committees may visit the local health department and milk bottling plants, reporting their findings to the group. Children may seek information from their parents and family physicians as to diseases they have had and diseases they have been immunized against. Panel discussions of techniques for protecting the community against disease are stimulating. Special resource visitors such as the public health nurse or sanitarian, invited to discuss particular subjects, debates, surveys and individual investigations help to make significant learning experiences. A well organized textbook and numerous suitable references enable pupils to build a factual background against which their experiences gain shape and substance. In every respect the teacher tries to make health education a “learning together” situation rather than a reading and telling session.

In learning about the prevention and care of sickness, a group of junior high school pupils conducted a survey to discover the percentage of pupils who had been immunized against diphtheria, tetanus, smallpox, poliomyelitis and whooping cough. They discussed the results of the study with the school physician and public health officer; read about and considered the contributions of Pasteur, Lister, Klebs, Loeffler, Reed, Finlay, Jenner, Salk, Banting, Best and (Continued on page 413)
physical education programs will be largely determined by the administrative leadership of the school and community. Boards of education, superintendents of schools, principals and other administrative officials will decide the prestige these programs have in the eyes of the students. Their prestige is strongly influenced by such factors as these: Whether credit is given to the subjects when calculating the requirements for graduation, how much money is provided in the budget for their development, the attention given to girls as well as boys, the degree of emphasis on physically underdeveloped students as compared to gifted athletes, and other administrative matters which affect the physical fitness of students.

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Health Education

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others to the conquest of disease; and debated the question, “Should immunization be mandatory for all?”

They invited special resource persons, such as representatives of voluntary health organizations, a public health nurse, and a sanitary engineer, to talk with them about community disease control measures. They developed colonies of bacteria and observed stained slides of disease germs. They surveyed their community for the presence of insects that might carry disease and discussed control measures. They visited the community water and sewage disposal plants to observe protective measures. They discussed with the school physician the need for regular medical examinations. They surveyed community resources for the care of sick persons and reported on types of treatment offered.

Individuals investigated contributions made by the State Health Department and the Public Health Service to the health and well-being of their community. They explored the role of the World Health Organization. These activities were kept solidly rooted in fact through constant reference to texts and resource books. Pupils who participate in this type of learning experience not only gain in factual knowledge, but also in the ability to make intelligent judgments about community measures for the control of disease.

Well-known are figures citing increasing longevity of American men and women and the comparative freedom from disease which we enjoy. Credit is due to widespread medical research, the availability of health services and, not least, to an educated citizenry impelled to take positive action in caring for its own health.

In a recent publication, the Educational Policies Commission stated that: “Health . . . depends upon a reasoned awareness of the value of mental and physical fitness and of the means by which it may be developed and maintained. Fitness is not merely a function of living and acting; it requires that the individual understand the connection among health, nutrition, activity and environment and that he take action to improve his mental and physical condition.”

Modern health education helps children and youth gain understandings and develop attitudes that enable them to maintain and improve their own health and that of their families and communities. Health education contributes to the attainment of the purposes of education. It is a basic component of the school curriculum.