

1980

## Need for Greater Concern for Nutrition in Science Programs

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# NEED FOR GREATER CONCERN FOR NUTRITION IN SCIENCE PROGRAMS

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## Introduction

Effective teaching of basic nutrition is a major deficiency in the schools of our nation. Although nutrition is one of approximately a dozen central themes generally recognized as comprising biology, it is an area which tended to be de-emphasized during the 1960's and early 70's. Nutrition was usually too applied in nature to be a major focus within the NSF curricula which were organized around the conceptual themes which characterize and unify the various disciplines of science. One of the first changes in the development of the so-called "new courses" of the 1960's was the elimination of any applications of the central ideas of science.

But the new courses that were developed with over \$100 million of NSF funds are not meeting the needs of students and of our society as 1980 approaches. This should not be surprising since the needs of society were different during the past two decades. The NSF courses were extremely successful in terms of producing more students with an understanding of the research areas of modern science and an interest in pursuing further study at the college level.

## Nutrition Education

Today there are mammoth problems facing society. These include population explosion, energy shortages, environmental degradation, recombinant DNA, abortion, test tube babies and more. Nutrition — both the personal diet habits of students and worldwide food shortages — represents another equally serious problem. And science education has a major responsibility for moving toward correctives.

In the September, 1979 issue of the *Phi Delta Kappan*, Phlegar and Phlegar provide some information concerning the importance of nutrition to the normal functioning of school children. They indicate how slow educators have been to observe and to be concerned with the direct relationship between the eating habits of students and their behavior and academic achievement. Evidence is presented which shows remarkable personality and behavior changes when synthetic food coloring and flavoring are eliminated from the diet. When one is interested in science programs which focus upon the personal needs of the student and the issues facing modern society, nutrition education can and should be central.

Recently, the U.S. Senate Select Committee on Nutrition and Human Needs proposed a significant statement identifying "Dietary Goals of the United States." The report states that "the American way of eating may be hazardous to your health." The Committee report is a first for this country. It is an attempt to form a nutrition policy for the entire country.

Senator George McGovern was the Chairperson of the Committee. He summarized the report:

*"The simple fact is that our diets have changed radically within the last 50 years, with great and often very harmful effects on our health — too much fat, too much sugar or salt, can be and are linked directly to heart disease, cancer, obesity, and stroke, among other killer diseases. In all, six of the ten leading causes of death in the United States have been linked to our diet."*

The Dietary Goals are controversial — and as such they are attractive points of departure in science teaching. Nutrition education is not merely the teaching of information to secondary school students. There are issues, problems, judgments, and decisions to consider. These are basic to science.

Nutrition education is by nature interdisciplinary. To be sure, it can and should be approached in home economics, health, and social studies as well as in science. Nutrition is an area — like other studies so central to the personal needs of students and to the issues facing society — where the urgency and complexity of the problem demands attention from a variety of viewpoints. Certainly the view of nutrition from the standpoint of science is central — both when one views nutrition and when one views the current goals of science instruction.

### Summary

Science teaching in 1980 is seen as focusing upon productive knowledge where the goal of science teaching is scientific enlightenment. This is in contrast to science teaching of the 1960's, when the focus was upon career preparation and the transmission of professional knowledge. Today, the focus of science education is upon science and technology for the advancement of society, in contrast to science as the advancement of knowledge and explanation which characterized all of the programs two decades ago. While the science teaching of the 1960's was directed toward the development of cognitive skills, the current efforts in science teaching are upon the development of effective, ethical, and esthetic understandings. Today's science is focused upon values where moral and ethical considerations are approached. This is in contrast to empirical science of an earlier time.

The goals of modern science teaching are derived from the interaction of science, technology and society. Formerly, the goals of science teach-

ing were internal to the various disciplines of science. With such new goals, areas such as nutrition have new meaning and importance for school science. Nutrition is one of the basic problems of our times — both at a personal and at a societal level. As such it is an important and central strand to any science program which is in tune to the more modern goals and the kind of science needed for 1980.

### References

- Phlegar, Fred L. & Barbara Phlegar, "Diet and Schoolchildren", *Phi Delta Kappan*, 61:53-36, 1979.
- Hurd, Paul DuHart, "The Teaching of Biology: A Possible Future", *BSCS Journal*, 1:20-25, 1978.
- "Nutrition: How America Stacks Up", *Current Consumer*, 2:4-13, 1978.
- "Dietary Goals of the United States", U.S. Government Publication Office, Booklet #052-070-93913-2, Washington, D.C., 1978.

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### Nutrition

A new science curriculum from Dairy Council, Inc., *K-6 Nutrition Program: Food . . . Your Choice*, is being expanded for use in grades 7-10. The materials will be available in the Fall of 1980 through Dairy Council, Inc. offices in Ankeny, Cedar Rapids, Davenport and Waterloo.

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### It's a Gas

Conoco has 500 speakers at locations in the U.S. available to speak to high school science classes on energy. More information about the free speakers can be obtained by contacting: Fred Beck, Continental Oil Company, High Ridge Park, Stamford, Conn. 06904.

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### Free Newsletter

*Chemecology*, a monthly newsletter, is published by the Manufacturing Chemists Association. The newsletter deals with environmental and occupational health matters. Write: *Chemecology*, MCA, 1825 Connecticut Ave. N.W., Washington, D.C. 20009.