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## The Report to Congress on the Appropriate Federal Role in Assuring Access by Medical Students, Residents, and Practicing Physicians to Adequate Training in Nutrition

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### Synopsis .....

*The Congress has had a long-time concern about the adequacy of nutrition education provided medical students and physicians during their training. Attempts over three decades to address this deficiency have been largely ineffective. Yet, recent changes in the delivery of health care from inpatient to outpatient services require physicians be competent in both applied nutrition and patient counseling.*

*The importance of patient counseling is underscored by the surveys of the National Center for*

*Health Statistics which reveal that overweight for the U.S. population has increased between the early 60s and the late 80s. These findings suggest that the Healthy People 2000 objective of reducing the prevalence of overweight may not be met.*

*Congress evidenced its concern about the nutrition education in the medical curriculum in Section 302 of the National Nutrition Monitoring and Related Research Act of 1990 that required a report on the subject from the Secretary of Health and Human Services. The Division of Medicine in the Health Resources and Services Administration, an agency of the Public Health Service, responded by compiling the report.*

*The report to Congress focuses on two issues—why it has been so difficult to increase the nutrition content of medical school curriculums and, if the Federal Government intervenes, what strategies might be effective.*

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The Healthy People 2000 objective of reducing the prevalence of overweight adults in the United States may not be met, based on findings from the National Health and Nutrition Surveys from 1960 to 1991 (1).

These surveys, conducted by the National Center for Health Statistics, are nationally based representative cross-sectional samples of the population. They include between 6,000 and 13,000 adults ages 20 through 74 years who undergo both personal interviews and medical examinations including measurements of height and weight.

A body mass index (BMI), relating weight to stature, is computed for individual participants. A BMI greater than 27.8 for men or 27.3 for women represents a weight status 20 percent or more above desirable (2a). Although BMI is positively related to a person's amount of leisure time and physical activity, especially among women (2b), diet is the main contributor to excess weight. Excess BMI peaks in men between the ages of 40 and 49 and in women between the ages of 50 and 59. It is especially acute among black and Hispanic women (2c).

The age-adjusted prevalence of overweight for the U.S. population ages 20 through 74 has increased from 24.3 percent in 1960-62 to 33.3 percent in 1988-89, with 7.9 percentage points of this increase occurring during the past decade.

The Surgeon General's Report on Nutrition and Health (3) declared

Dietary excesses or imbalances . . . contribute to other problems such as high blood pressure, obesity, dental diseases, osteoporosis, and gastrointestinal diseases. Together, these diet-related conditions inflict a substantial burden of illness on Americans.

Dietary-related illnesses and health problems result in the use of medical services. Slightly more than 70 percent of the visits to non-Federal office-based physicians for weight reduction counseling and cholesterol reduction counseling are to general and family practice physicians and to internal medicine physicians. Weight reduction and cholesterol reduc-

tion counseling make up 8.6 percent of visits by males and 9.0 percent of visits by females to non-Federal office-based physicians (2d).

Nutritionists believe that, with an increase in the delivery of health care from inpatient to outpatient services, physicians need to know more about applied nutrition and how to educate their patients about the nutritional programs they prescribe. Effectual patient counseling by physicians, especially primary care physicians, such as family practice or internal medicine physicians, can contribute to health promotion and disease prevention which would lead to reduction in the cost of health care. To acquire such expertise, primary care physicians should be exposed to explicit nutrition education and counseling techniques while in medical school.

Currently, however, little emphasis is given to applied nutrition in medical education. Nutrition is adjunctive to other required courses, such as biochemistry, physiology, and pathology. There exists substantial institutional and structural inertia against incorporating a substantively larger amount of nutrition into the overcrowded medical school curriculum. However, interest in nutrition education is now emerging among physician groups in which interest previously has not been strongly manifest. The Society of General Internal Medicine and the American Academy of Family Practice both have special nutrition interest groups.

Medical educators are increasingly of the opinion that more physicians must be trained as primary care providers. Ambulatory settings are considered invaluable as settings for primary care training. Inadequate nutrition training for physicians will detract from their capability to recognize subtle nutritionally-related illnesses or, more importantly, to provide patients with counseling, thus detracting from their effectiveness to function in such settings. Improved quality of nutrition knowledge and enhanced effectiveness of physicians to provide nutritional counseling and to recommend nutrition programs for their patients would reinforce competence among primary care physicians to provide comprehensive care, that is, the capability to recognize and diagnose a broad spectrum of common illnesses and to be more influential in changing patient behavior.

Attempts to address inadequacies in nutrition education in medical schools spans at least three decades. In 1960, the American Medical Association Council of Foods and Nutrition reported inadequate recognition, support, and attention to nutrition in U. S. medical schools. The first conference in the United States to address inadequate nutrition education for physicians, sponsored by the American Medical

Association in 1962, was the Chicopee Conference on the Teaching of Nutrition in Schools of Medicine.

The U. S. Senate Select Committee on Nutrition and Human Needs dealt with the relation of health and nutrition when it solicited testimony in 1968-69 linking poverty, malnutrition, and hunger. This testimony was distressing in its revelations concerning the extent of malnutrition, especially among children, in the poorer sections of this country.

Ten years after the Chicopee Conference, the 1972 Williamsburg Conference on Guidelines for Nutritional Education in Medical Schools and Post-Doctoral Training Programs found little progress had been achieved in instituting nutritional training in either medical school curriculums or in residency programs other than in nutritional support activities. Surveys conducted by the Liaison Committee for Medical Education indicated that after increasing through the 1960s and 1970s, the number of schools requiring nutrition as a separate course peaked in 1981-82 at 37 percent and has since declined to about 23 percent.

The National Research Council reported in the 1985 publication "Nutrition Education in U.S. Medical Schools" that the teaching of nutrition in most U.S. medical schools is inadequate and made several recommendations concerning topics, structure, and faculty to institute a greater emphasis on nutritional education (4). One of these recommendations was that additional financial support be provided for the development of teaching aids and the training of a cohort of clinical scientists with competence in nutrition.

The Congress has had a long-time concern that inadequate nutrition education has been provided medical students and physicians. Inattention to nutrition education continues despite a sustained interest by many organizations and individuals in increasing the nutrition education content in medical schools and residency programs. Legislation reflecting the interest of the Congress in this topic dates back at least to 1977 with the enactment of the Food and Agriculture Act of 1977 which provided for a comprehensive nutrition status monitoring system.

The Congressional Research Service prepared a study published in 1977 entitled "The Role of the Federal Government in Nutrition Education" for the House Agriculture Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition. The continuing concern of Congress about nutrition education of physicians, or its neglect, was evident in Section 302 of the National Nutrition Monitoring and Related Research Act of 1990 (P.L. 101-455). That section required the Secretary of Health and Human

Services to develop a report “describing the appropriate Federal role in assuring that students enrolled in the United States medical schools and physicians practicing in the United States have access to adequate training in nutrition and its relationship to human health.”

The Secretary directed the Health Resources and Services Administration (HRSA) of the Public Health Service to compile the report required in the Act. HRSA’s Division of Medicine, Bureau of Health Professions, was given the assignment. Two committees were formed to assist in developing the report.

A committee of experts in nutrition and medical education was convened to deliberate two issues—(a) why increasing the nutrition content of medical school curriculums has been so difficult and (b) the desirability of intervention by the Federal Government and if it should intervene, what strategies might be effective in accomplishing successful intervention.

A Federal Resource Panel provided continuing guidance and a review of documents.

The report to Congress, incorporating the deliberations of the experts and their recommendations, was the culmination of combined efforts of the Federal Resource Panel, committee of experts, Division of Medicine staff, and other HRSA personnel. Macro International, Inc., of Calverton, MD, convened the two groups and did some of the research.

Some of the salient impediments to increased attention to nutrition education noted in the report are medical training oriented to the diagnosing and treatment of disease; reimbursement for procedures related to the treatment of disease; demands of full biomedical curriculums according nutrition education a low priority; and the educational culture in many medical schools that emphasizes and rewards specialization.

The report identifies barriers in four areas likely to impede any attempts at progress without significant changes—the reimbursement system; the examination and credentialing process; the resistance to change within the medical education community; and the impact on the medical community from concerns about reimbursement and uncertainty about a physician’s ability to control patient outcome.

The report states that there are a number of successful Federal activities, but they are inadequate to achieve the broad objectives embodied in the congressional request. Several possible strategies are suggested and discussed. These potential Federal roles and strategies are

1. substantiation and documentation of nutrition-related health outcomes;

2. promotion of model nutrition curriculums for physician education;

3. development of medical school faculty competence in nutrition to teach and serve as role models; and

4. fostering of changes in physician reimbursement, either directly in public payer programs or as a catalyst in private sector payer programs.

The report warns that nutrition monitoring and research must continue to be emphasized. The putative benefits of nutrition and proper diet must materialize or the strategies should be assessed for more effective application.

Nutrition knowledge and application is important. The report describes strategies that the Federal Government can pursue, some without congressional authorization. A call for action has been made.

The report by Macro International, “Nutrition Education for Physicians: Alternative Federal Roles for Creating an Improved System,” No. PB 93–189074, and “The Report to Congress on the Appropriate Federal Role in Assuring Access by Medical Students, Residents, and Practicing Physicians to Adequate Training in Nutrition,” No. PB 94–189370, are available from the National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161; tel. 703-487-4690.

## References.....

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3. Public Health Service: Surgeon General’s report of nutrition and health. U.S. Government Printing Office, Washington, DC, 1988.
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