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## Editorial

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# Nutrition Teaching in Medical Education: A Case of Chronic Neglect

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There is ample evidence that nutrition education has been largely ineffective in US medical education for many years. Less than 10 percent of the nation's medical schools include a nutrition course in the required curriculum for medical students.<sup>1</sup> In one study, Podell and his colleagues<sup>2</sup> examined the level of clinical nutrition knowledge among three groups of practicing physicians (family physicians, internists, and pediatricians) and medical students in their clinical years. They found, for example, that only one in five of respondents answered correctly questions dealing with diet therapy for high triglycerides, foods for a low-salt diet, potential complications of long-term fasting, caloric value of physical activity, and recommended dietary allowances. Other observers have demonstrated low levels of nutrition knowledge among medical students,<sup>3,4</sup> while still others have called attention to the inadequacy of nutrition teaching and competency at a postgraduate level.<sup>5,6</sup> Butterworth<sup>7</sup> has described iatrogenic malnutrition in hospitals and referred to this problem as "the skeleton in the hospital closet." Recognition of the chronic gap in nutrition education in medicine has extended well beyond the medical profession itself. Indeed, a US Senate Committee held hearings in 1979 on the status, problems, and potential solutions to nutrition education in medical schools.<sup>8</sup>

The clinical implications of this educational gap are profound. Four examples make the point and illustrate the scope of the problem. An alarming prevalence of protein-calorie malnutrition has been demonstrated in both medical and surgical patients of an urban teaching hospital.<sup>9,10</sup> Although physicians are often unaware of the use of nutritional supplements by their patients, these supplements can produce a variety of undesirable

problems including urinary tract stones, hemolytic anemia, and interference with diagnostic tests.<sup>11</sup> The US Senate Select Committee on Nutrition and Human Needs in 1977 estimated that a reduction of about 20 percent in the incidence, prevalence, and costs in most disease categories could be realized through improved nutrition.<sup>12</sup> In a large national study of the content of family practice, Rosenblatt and his colleagues<sup>13</sup> have shown that the 12 most common clinical entities encountered by US family physicians in everyday practice include hypertension, prenatal care, well-child care, ischemic heart disease, diabetes mellitus, and obesity, all requiring substantial expertise in nutrition in their management.

A number of important initiatives have recently been embarked upon in response to the need for improved clinical teaching of nutrition. Gautreau and Monsen<sup>14</sup> have completed a study identifying those nutritional concepts ranked of highest priority by medical faculty, dietitians, nutritionists, practicing physicians, and medical students. Gjerde and Sinnott<sup>15</sup> have completed a similar study within family practice identifying 29 nutrition skills as being very important for family physicians. Together, the findings of these studies constitute an excellent curriculum in clinical nutrition for primary care physicians. Nutrition is now a required part of the curriculum for US family practice residencies as defined by the current Special Requirements for Residency Training in Family Practice (*Essentials*), which took effect in 1983. Some of these programs have already established and evaluated comprehensive teaching programs in clinical nutrition,<sup>16</sup> and about 40 percent of the programs have dietitians on their staffs, as described elsewhere in this issue.<sup>17</sup>

In addition to these efforts, several other steps

seem warranted and readily achievable in family practice so that effective training in this important area can be assured:

1. Assist and participate in interdisciplinary programs for the teaching of clinical nutrition in medical schools.

2. Include learning experiences and teaching modules in clinical nutrition in both family practice clerkships and family practice residencies.

3. Develop ongoing consultative-teaching relationships in family practice centers with dietitians or clinical nutritionists in much the same way as with other fields (eg, clinical pharmacy).

4. Include clinically relevant nutrition teaching in continuing medical education programs for family physicians.

5. Address further studies to clinical nutrition problems in family practice settings as part of expanding research activities in family medicine.

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