



## VIEWS AND REVIEWS

# Medical schools should be prioritising nutrition and lifestyle education

Students need to understand the role of diet in health promotion and disease prevention

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Would you expect a junior doctor to be confident giving basic advice and care for the most common and fatal diseases? Of course you would. The National Institute for Health and Care Excellence guidelines state that a first line intervention for diabetes, obesity, and high cholesterol is to give “lifestyle advice”—but this phrase is so vague that it is left up to doctors and patients to define it and, potentially, ignore it.

In 2008 and 2009, more than 75% of American junior physicians felt inadequately trained to counsel patients on diet and physical activity.<sup>1</sup> The picture is reportedly similar in the UK.<sup>2</sup> In *Tomorrow's Doctors*, the General Medical Council requires qualifying medical students to understand the role of diet in health promotion and disease prevention, which includes being nutritionally competent. Internationally, this knowledge is lacking in medical training. Just 27% of US medical schools provided the agreed minimum of 25 hours of nutrition education in 2008.<sup>3</sup> A recent study of European medical schools was slightly more optimistic, suggesting that nutrition education was a requirement in 68.8% of institutions surveyed, with an average of 23.68 hours of teaching.<sup>4</sup>

This, however, has not been our experience at medical school in the UK, where nutrition education has been notably lacking. It is not that students don't want to learn this material. If individual universities had the courage to lead the way in preventative nutrition, the majority of medical students would be only too keen to learn more about the subject.

Nutrition science suffers from an image problem in medical practice. This starts with its subordination in curriculums and qualifying exams. Dietary interventions are considered to be outside of the evidence base, unscientifically “fluffy,” and the domain of dietitians rather than doctors. Medical students first hear about nutrition in biochemistry lectures about specific metabolic pathways, abstracted from disease mechanisms or patient experiences. In later clinical years, the details of healthy diets, ways to assess malnutrition, or specific food requirements for particular diseases in hospital and community settings are glossed over.

Medical students are routinely presented with evidence for pharmaceutical decision making, but rarely empirical data about the impact of nutrition or exercise (of course, there is also the problem that less evidence in this field is available). This undervaluation of nutritional knowledge continues when it comes to professional expectations. It is rightly required that doctors stay up to date with the continuously revised NICE guidelines in specialties such as oncology. This ongoing learning is seen as a mark of medicine's progress. But changes in nutritional guidance are considered symptomatic of the field's instability and lack of scientific certainty. Why in the case of nutrition science is amendment not expected, but rather belittled?

Knowing exactly what we mean by “improving patients' diet and lifestyle” would enable doctors to focus on how they counsel patients, personalised to comorbidities, individual cultures, and characters. While the central aim should not be to save money, if NHS doctors become more effective and efficient at giving lifestyle advice, the opportunity to prevent disease on an impressive scale would free up resources.

Other medical systems have made attempts to tackle inadequacies in nutrition education. The American College of Preventive Medicine introduced a “lifestyle medicine core competencies program,” and in 2009 Harvard Medical School established a student and faculty led curriculum in lifestyle medicine.

Physical activity and nutrition have recently become a focus in developing countries because of the observed rise in chronic diseases. Lifestyle interventions are earning a reputation as cost effective and clinically useful, as well as being realistic ways to cope with an increasing burden of disease. Recent research in west Africa found that medical schools that teach nutrition (67% of the total) dedicated 57 hours to such content.<sup>5</sup> In 2012, Nigeria adopted a new curriculum with an emphasis on human nutrition. These admirable advances could prove to be another case of “global health at home,” whereby practices developed in a setting of resource scarcity become increasingly attractive in the West.

The UK should be prioritising nutrition and lifestyle education in a similar way. Our government aims to prevent tens of thousands of premature deaths from heart disease and cancer by 2020. Nutrition could indeed be—as NICE envisions—a first line intervention to tackle these conditions, if only dietary advice were more accessible in primary care settings. Currently, a patient must be referred to see a dietician, and GPs can justify this referral only if a patient is experiencing serious risks or sequelae from a disease related to nutrition.

Therefore, expert nutritional advice in the NHS is, by default, interventional. It is a response to pathogenesis, rather than a prophylactic part of “salutogenesis” (the creation and maintenance of health and wellbeing). Although weight is a modifiable risk factor for early morbidity and mortality, the way that the NHS is structured and the training given to students and juniors undermines this opportunity for change.

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