Update on Nutrition Curricula for Medical Education, Research, and Practice: USA Perspective

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Nutrition and physical activity behaviors influence health and disease, and contribute to the leading causes of death in the US. Yet, studies have shown that nutrition education in medical schools is inadequate and there have been minimal to no improvements over the past 30 years. Although physicians in the US are not confident to counsel patients in nutrition-related conditions, little is known about nutrition education and training in residency and fellowship programs.

In recognition of the need to develop and enhance undergraduate and graduate medical nutrition education, the National Heart, Lung, and Blood Institute (NHLBI) and the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health established the Nutrition Academic Award (NAA) Program in 1997 [1]. The NAA awarded grants to 21 US medical and osteopathy schools to improve teaching of nutrition principles and clinical practice skills with an emphasis on preventing cardiovascular diseases, obesity, diabetes, and other chronic diseases. Educational resources were developed including the Nutrition Curriculum Guide for Training Physicians (2002) which offered more than 400 educational objectives that medical students, residents, and fellows need to attain upon graduation.

Since the NAA effort, nutrition and lifestyle champions have developed several models to incorporate nutrition in the medical school curriculum. Examples include online educational modules, hands-on culinary workshops, dedicated courses, and integrated content that may include threads throughout undergraduate medical education. In some schools, nutrition groups of interests (or clubs) led by medical students facilitated education and dialog on nutrition from the bottom up. These champions have also continued to advocate for inclusion of nutrition content in the US Medical Licensing Examination and for recognition of medical nutrition as a national subspecialty in medicine.
In 2012, NHLBI in partnership with the American Society for Nutrition (ASN) convened a workshop *Future Directions for Implementing Nutrition across the Continuum of Medical Education, Training, and Research* to develop recommendations for remodeling nutrition education, training, and research [2–4]. As medical education has shifted to a competency-based system [5], a subsequent NHLBI workshop held in 2017 recommended an inter-professional approach to update the NAA curriculum guide; the development of medical nutrition Entrustable Professional Activities (EPAs), competencies, and milestones; and further research in medical nutrition, metabolism, and lifestyle.

In both NHLBI workshops, establishment of a mechanism to coordinate multiple stakeholders was identified as critical to advance a medical nutrition education agenda. Given its leadership role in nutrition research and education, ASN was identified as the organization best positioned to coordinate activities to promote effective development and implementation of nutrition education in medical and allied health professional schools; and harmonize ongoing efforts to achieve the best possible outcomes. Recently, the ASN Board approved the establishment of a coordinating center to guide the nutrition education of healthcare professionals. A planning committee defined the effort’s scope, governance structure, and timeline and completed a gap analysis. This effort will focus on the following to impact medical nutrition education:

- **Coordination of Resources**: Collect, centralize, and distribute multidisciplinary educational resources, credentialing resources and practice and reimbursement resources
- **Networking and Community Building**: Develop a repository of links/networks/contact information to organizations/schools/committees in order to increase the organization of already available educational data, educational materials, exam questions etc.
- **Confirmation of Objectives**: With stakeholders, define 1) provider competencies (specific tasks that involve knowledge, skills, and attitudes) for medical schools and 2) Entrustable Professional Activities (EPAs, tasks that define a profession) for residence programs.
- **Capacity Building**: Train “nutrition ambassadors” to conduct and consult on education programs for healthcare professionals within and outside of the US.
- **Research**: Identify and disseminate funding opportunities
- **Advocacy**: Advocacy for education, legislation, and/or research funding

Funding and partners are currently being sought to launch and administer this coordinating center through a public-private partnership platform.
Reference