

Nutrition in a changing world

As developing countries continue to urbanise and populations become wealthier, people's diets can begin to change; tending to shift towards resource-intensive foods such as meats and dairy.¹ At the same time, investment in technology, economic growth and implementation of government policies can alter entire food chains allowing multinational agri-businesses and food manufacturers to increasingly influence how food is being grown and consumed.²

This convergence towards a more western style diet has significant implications, not only for population health, but also the health of the planet as we continue to deplete resources. The United Nations (UN) Food and Agriculture Organisations (FAO) have projected that the world will need to close a 70% 'food gap' between the calories currently available from crops, and the expected demand for calories in 2050,³ thus the world's food system is currently facing a great 'balancing act'.

Until now, efforts to sustainably feed a growing and increasingly affluent population have been focused on expanding food production, rather than addressing consumption. Whilst some would argue that if adopting modern methods and technologies allowed agriculture production to triple during the first Green Revolution, what is stopping a second revolution?

Yet, given that global crop yields would need to grow over 30% more quickly than they did during the first Green Revolution, focusing on production alone to close this 'food gap' would put enormous pressure on planetary resources to further expand crop and pastureland.⁴ It would also make it increasingly harder to achieve the UN Sustainable Development Goals surrounding water management and climate change.⁵ Given the magnitude and environmental implications of this global challenge, it is critical we begin to expand the focus to shifting towards sustainable consumption patterns in the coming decades.⁶

Currently, 50% of the world's population consumes a nutritionally imbalanced diet either through overconsumption, hunger and micronutrient malnutrition.⁷ Thus, shifting to a more sustainable, and nutritionally balanced diet could have a positive impact on global food security, human health, healthcare costs, in addition to natural resources and animal welfare.

The Society's 2021 Summer Conference aims to communicate these challenges facing nutrition professionals and nutrition research in a changing world

Delegates attending the conference will have opportunities to learn about climate change as it relates to diet and food systems, as well as the agricultural and dietary behaviour changes required to sustainably feed the growing world population. This will be discussed in the context of the continuing need to meet the more specific nutritional needs of an aging population, addressing the growing issues of food poverty and dietary inequalities, and raising awareness of the importance of preconception nutrition for lifelong health.

Notable speakers include Professor Alan Dangour from the London School of Hygiene and Tropical Medicine, who will discuss '*The food system and climate change: agricultural perspective*', and Dr Alison Tedstone, Chief Nutritionist at Public Health England, who will be looking at how the UK Government has progressed with addressing childhood obesity.

Symposia will cover the dynamic and evolving nature of nutrition topics, including food production techniques, food poverty and dietary inequalities, nutrition requirements across the life course and how these can be met sustainably. The conference will be held online allowing nutrition professionals or those with an interest in the topic to attend the event from anywhere in the world.

To register and to view the full programme, please visit:

www.nutritionandsociety.org/events/summer-conference-nutrition-changing-world

The Society's Training Academy will soon be launching a new series of webinars hosted by leading experts in the field to support nutrition professionals with an in-depth overview, and possible solutions to meeting this important global challenge. **Keep an eye out for further details.**

References: **1.** Vermeulen SJ, et al. (2020). Changing diets and the transformation of the global food system. *Annals of the New York Academy of Sciences*: 1478: 3-17. **2.** Floros JD, Newsome R and Fisher W (2010). Feeding the World Today and Tomorrow: The Importance of Food Science and Technology. *Comprehensive Reviews in Food Science and Food Safety*; 9: 572-599. **3.** Alexandratos N and Bruinsma J (2012). World agriculture towards 2030/2050: The 2012 revision. Rome: Food and Agriculture Organization of the United Nations (FAO). **4.** Arcand Y, Maxime D and Zareifard R (2012). Life cycle assessment of processed food. In J. I. Boye and Y. Arcand (eds.) *Green Technologies in Food Production and Processing*. New York: Springer US. **5.** Bruinsma J (2009). *The Resource Outlook to 2050: By how much do land, water and crop yields need to increase by 2050?* Rome: Food and Agriculture Organization of the United Nations. **6.** Eini-Zinab H, Sobhani S, Rezazadeh A (2020). Designing a healthy, low-cost and environmentally sustainable food basket: An optimisation study. *Public Health Nutrition*; 1-10. doi:10.1017/S1368890020003729. **7.** FAO, WFP, and IFAD (Food and Agriculture Organization of the United Nations, World Food Programme, and International Fund for Agricultural Development). (2012). *The State of Food Insecurity in the World 2012. Economic growth is necessary but not sufficient to accelerate reduction of hunger and malnutrition*. Rome: FAO.

Events Calendar

- **22-24 June 2021, Irish Conference** – Nutrition, Health and Ageing: translating science into practice: www.nutritionandsociety.org/events/irish-section-conference-2021-nutrition-health-and-ageing-translating-science-practice
- **6-8 July 2021, Summer Conference** – Nutrition in a changing world: www.nutritionandsociety.org/events/summer-conference-nutrition-changing-world
- **Introduction to Human Nutrition Series** – Following its third edition publication, the NSTA has produced a 5-part webinar series to support its content and provide an additional source of learning: www.nutritionandsociety.org/events/introduction-human-nutrition-webinar-series
- **Obesity Series** – Since COVID-19, the obesity crisis has featured heavily in government plans and subsequently the media. The series to date looks at childhood obesity, as well as the physiology and management of type 2 diabetes: www.nutritionandsociety.org/events/obesity-world-wide-what-can-be-done-and-where-does-responsibility-lie-individuals-or-society

Continue your professional development around your busy schedule – Pre-recorded versions of recent NSTA webinars are available to listen to at a variety of different times on the website.

ALL Nutrition Society Events are CPD endorsed by the Association for Nutrition.