



# Irish Section Conference 2025

**Promoting optimal nutrition for  
people and the planet**

11-13 June 2025 - Dublin, Ireland

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Dear Colleagues,

On behalf of The Nutrition Society, we are delighted to welcome you to the Irish Section Conference 2025, hosted by Technological University Dublin. This year's conference will focus on the theme "Promoting optimal nutrition for people and the planet".

An individual's nutritional status impacts their health status and can reduce their risk of disease or aid with disease management. Primary prevention of disease through optimising diet and diet-related behaviours is a key strategy to improve population health. A more healthful dietary intake is also associated with better planetary health, and a focus on both is needed to ensure we meet the needs of the world's growing population in a sustainable and equitable way.

The Sustainable Development Goals (SDGs) were created in 2015 with the aim of "peace and prosperity for people and the planet, now and into the future". At this conference, we will consider the intersection between nutrition and sustainability and consider how human health can be optimised, in ways that protect planetary health.

Over the three days of this conference, you will hear from leading experts in the field. The first symposium introduces the concept of optimal nutrition throughout the lifecycle. The second explores the intersection of health, nutrition, and sustainability by describing sustainable interventions aimed at improving nutritional status. Finally, the third symposium looks to the future and considers policy implications of sustainable nutrition, with a particular focus on vulnerable population subgroups.

In addition to the core scientific programme, we are excited that there will be over seventy original communications delivered as oral and poster presentations. The Julie Wallace Award and Postgraduate competition presentations will showcase exciting new research findings from emerging early career researchers in our field.

Please join us at the social events organised, which are always a highlight of the Irish Section Conference. There will be a barbeque on Wednesday evening and a Gala dinner on Thursday evening.

We look forward to seeing social media alive with comments and photos about this conference. Please use and follow the hashtag #NSIrish2025 and tag us @NutritionSoc. Members can also make use of Member-Connect to network with other delegates, exchange views, and discuss the latest research presented during the conference.

We hope that you enjoy the conference. There will be opportunities to provide feedback, and we encourage you to do so as it will help improve future Nutrition Society events.

Yours sincerely,

Dr Eileen O'Brien and Dr Liz O'Sullivan  
*Technological University Dublin, Ireland*  
*Local conference organisers*

**DAY ONE**  
**WEDNESDAY 11 JUNE**

**08:30 Registration**  
*Central Quad Foyer*

**09:15 Welcome**  
*Dr Liz O'Sullivan, Technological University Dublin, Ireland*  
*Dr Eileen O'Brien, Technological University Dublin, Ireland*

**Symposium One: Nutrition and health through the life course**  
*Intel Auditorium*

**09:30 Nutrition and food behaviours of children and adolescents: a health promotion perspective**  
*Professor Colette Kelly, University of Galway, Ireland*

**10:10 The effect of lactation and weight loss on risk factors for cardiometabolic disease among postpartum women with overweight**  
*Professor Hilde K Brekke, University of Oslo, Norway*

**10:50 Refreshment Break**  
*Central Quad Foyer*

**11:10 Gut microbiota and its interaction with diet in the onset, propagation and management of non-communicable disease**  
*Professor Konstantinos Gerasimidis, University of Glasgow, UK*

**11:50 Personalising the path to sustainable diets: supporting behaviour change across the life course**  
*Associate Professor Aifric O'Sullivan, University College Dublin, Ireland*

**12:30 Lunch Break**  
*Central Quad Foyer*

**12:45 Networking for Early Career Members**  
**CQ009**

The Early Career Section of The Nutrition Society are excited to host a Networking Event for Early Career Members, providing a valuable opportunity to connect, share experiences and expand professional

networks. Lunch will be provided!

**13:30 Original Communication Session One**

*OC01 – OC08, Intel Auditorium*

*OC09 – OC21, CQ007*

*OC22 – OC39, CQ008*

**15:30 Refreshment Break**

*Central Quad Foyer*

**16:00 Original Communication Session Two**

*OC31 – OC34, Intel Auditorium*

*OC40 – OC47, CQ008*

**17:00 Closing Remarks**

**18:30 Barbecue and Networking**

*Harbourmaster Bar & Restaurant Customs House Dock*

*Pre-registration is required to join this event.*

## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

### Oral Session One

Room: Intel Auditorium

Time: 13:30 – 15:30

- 13:30    OC01    A novel personalised nutrition intervention with tailored behavioural support to increase legume consumption in university students.** *P.S. Elliott<sup>1</sup>, L.D. Devine<sup>1</sup>, E.R. Gibney<sup>1</sup>, A.M. O'Sullivan<sup>1</sup>* 1. *Institute of Food and Health, School of Agriculture and Food Science, University College Dublin, Dublin 4, Ireland.*  
**Student Competition**
- 13:45    OC02    Assessing blood pressure variability and phenotypes in older adults: Comparing clinic and ambulatory blood pressure monitoring.** *C. Goland<sup>1</sup>, P. Heavey<sup>1</sup> and G. Cuskelly<sup>1</sup>* 1. *SHE (Sport, Health and Exercise) Research Centre, Department of Sport and Health Sciences, Technological University of the Shannon, Athlone, Ireland.*  
**Student Competition**
- 14:00    OC03    Examining associations between body composition, resting metabolic rate, appetite and energy intake in older adults.** *A. Quinn<sup>1,2,3</sup>, B. Mullen<sup>1,2,3,4</sup>, L. Kirwan<sup>1</sup>, H. M. Roche<sup>1,2,4</sup>, C. A. Corish<sup>1,2</sup> and K. Horner<sup>1,2,3</sup>* 1. *School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin 4, Republic of Ireland,* 2. *UCD Institute of Food and Health, University College Dublin, Dublin 4, Republic of Ireland,* 3. *UCD Institute for Sport and Health, University College Dublin, Dublin 4, Republic of Ireland and* 4. *Nutrigenomics Research Group, UCD Conway Institute and School of Public Health, Physiotherapy and Sports Science, University College Dublin.*  
**Student Competition**
- 14:15    OC04    Transitioning towards sustainable and healthy dietary behaviours: perceived barriers among university students.** *L.D. Devine<sup>1</sup>, P.S. Elliott<sup>1</sup>, M.F. O'Neill<sup>1</sup>, A. Horgan<sup>1</sup>, E.R. Gibney<sup>1</sup> and A.M. O'Sullivan<sup>1</sup>* 1. *Institute of Food and Health, School of Agriculture and Food Science, University College Dublin, Dublin 4, Ireland.*

- 14:30    OC05    Guiding adolescent boys in Ireland to more plant-based diets: the fibre challenge.** C. McCann<sup>1,2</sup>, S. Mehmood<sup>1,3</sup>, N. Yep<sup>1,3</sup>, N. Clarke<sup>1</sup>, M. A. T. Flynn<sup>1,2</sup> 1. Food Safety Authority of Ireland, Dublin 1, Republic of Ireland, 2. School of Biomedical Sciences, Ulster University, Coleraine, Northern Ireland and 3. School of Biological, Health and Sports Sciences, Technological University Dublin, Dublin 7, Ireland.  
**Student Competition**
- 14:45    OC06    Investigating the factors that influence fish consumption in children aged 4 to 11 years in Northern Ireland: A parental survey.** B. Muki<sup>1</sup>, M.S. Mulhern<sup>1</sup>, E. M. McSorley<sup>1</sup>, J.J. Strain<sup>1</sup>, P. J. Allsopp<sup>1</sup> and A. J. Yeates<sup>1</sup> 1. Nutrition Innovation Centre for Food and Health (NICHE), School of Biomedical Sciences, Ulster University, Coleraine, Northern Ireland.  
**Student Competition**
- 15:00    OC07    Early prenatal predictors of breastfeeding intention in women at risk of gestational diabetes in Ireland, UK, Spain, and Australia.** Liz McGovern<sup>1,2</sup>, Fionnuala M. McAuliffe<sup>2</sup>, Christy Burden<sup>3</sup>, Cristina Campoy<sup>4,5</sup>, Helena Teede<sup>6</sup>, Timothy Skinner<sup>7,8</sup>, Rachel A. Laws<sup>9</sup>, Helle Terkildsen Maindal<sup>10</sup>, Sharleen O'Reilly<sup>1,2</sup> on the behalf of the Impact Diabetes B2B Consortium 1. UCD School of Agriculture and Food Science, University College Dublin, Belfield, Dublin 4, D04 V1W8, Ireland, 2. UCD Perinatal Research Centre, School of Medicine, University College Dublin, National Maternity Hospital, Dublin 2, D02 YH21, Ireland, 3. Academic Women's Health Unit, Translational Health Sciences, Bristol Medical School, University of Bristol, UK, 4. Department of Pediatrics, School of Medicine, University of Granada, Spain, 5. Instituto de Investigación Biosanitaria ibs.GRANADA, Health Sciences Technological Park, 18012, Granada, Spain, 6. Monash Centre for Health Research and Implementation, School of Public Health and Preventive Medicine, Monash University, Australia, 7. Institute for Psychology, University of Copenhagen, Denmark, 8. Australian Centre for Behavioral Research in Diabetes, Deakin University, Melbourne, Australia, 9. School of Exercise & Nutrition Sciences, Institute for Physical Activity and Nutrition, Deakin University, Australia, and 10. Department of Public Health, Aarhus University, Denmark.  
**Student Competition**



15:15      OC08      **Impact of a multidisciplinary day-case intervention on dietary intake and symptom severity in hyperemesis gravidarum: a quasi-experimental study.** *E.C. O'Brien<sup>1</sup>, E. Cowhig<sup>1</sup>, J. Doherty<sup>2</sup>, M. Bennett<sup>2</sup>, S. Curran<sup>2</sup>, S. Murphy<sup>2</sup>, L. Sheehy<sup>2</sup>, H. McHale<sup>2</sup>, S.L. Killeen<sup>2</sup>* *1. School of Biological, Health and Sports Science, Technological University Dublin, Dublin, Ireland and 2. The National Maternity Hospital, Dublin, Ireland.*

## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

### Poster Session One

Room: CQ007

Time: 13:30 – 15:30

- 13:30 OC09 Food fortification with B-vitamins in relation to immune function in older adults: analysis from the TUDA study.** *U. Shabbir, H. McNulty, C. Hughes, M. Ward, J. Dooley and L. Hoey* 1. Nutrition Innovation Centre for Food and Health, Ulster University, Coleraine, Northern Ireland.  
**Student Competition**
- 13:37 OC10 Exploring the role of deprivation in a school-based food intervention study: impact on diet diversity and quality in primary school children.** *D. Olgacher<sup>1</sup>, C. Wallace<sup>1</sup>, S. F. Brennan<sup>1,2</sup>, F. Lavelle<sup>3</sup>, S. E. Moore<sup>1,2</sup>, M. Dean<sup>2</sup>, M. C. McKinley<sup>1,2</sup>, P. McCole<sup>4</sup>, R. F. Hunter<sup>1</sup>, L. Dunne<sup>5</sup>, N. E. O'Connell<sup>2</sup>, C. R. Cardwell<sup>1</sup>, C. T. Elliot<sup>2</sup>, D. McCarthy<sup>2</sup>, and J. V. Woodside<sup>1,2</sup>* 1. Centre for Public Health, Queen's University Belfast, Belfast, UK, 2. Institute for Global Food Security, Queen's University Belfast, Belfast, UK, 3. Department of Nutritional Sciences, King's College London, London, UK, 4. School of Business, Maynooth University, Maynooth, Co. Kildare, Ireland and 5. Centre for Evidence and Social Innovation, Queen's University Belfast, Belfast, UK.  
**Student Competition**
- 13:45 OC11 Preliminary analysis of dietary sustainability in Irish children: insights from the National Children's Food Survey II.** *Michael O'Neill<sup>1</sup>, Petra Van Der Wel<sup>1</sup>, Maria Buffini<sup>1</sup>, John Kearney<sup>2</sup>, Laura Kehoe<sup>3</sup>, Janette Walton<sup>3</sup>, Albert Flynn<sup>4</sup>, Breige McNulty<sup>1</sup>* 1. Institute of Food and Health, School of Agriculture and Food Science, University College Dublin, 2. School of Biological & Health Sciences, Technological University Dublin, Dublin, Ireland, 3. Department of Biological Sciences, Munster Technological University, Cork, Republic of Ireland and 4. School of Food and Nutritional Sciences, University College Cork, Ireland.  
**Student Competition**
- 13:52 OC12 Solid-state fermentation effects on the anti-nutrient and antioxidant capacity of single cell proteins for food applications.** *N. Sunderland and C. Barry-Ryan* Sustainability and Health Research Hub – SHRH, Greenway Hub, Grangegorman, Dublin 7,

*School of Food Science and Environmental Health, TU Dublin,  
City Campus, Central Quad, Grangegorman Lower, Dublin 7.*  
**Student Competition**

**14:00 OC13 Food-based dietary guidelines and adolescent boys: ‘the ups and downs’ of iron fortification.** *S. Mehmood<sup>1,2</sup>, C. McCann<sup>1,3</sup>, N. Yep<sup>1,2</sup>, N. Clarke<sup>1</sup>, M. A. T. Flynn<sup>1,3</sup>* 1. Food Safety Authority of Ireland, Dublin 1, Republic of Ireland, 2. School of Biological, Health & Sport Sciences, Technological University Dublin, Dublin 7, Republic of Ireland and 3. School of Biomedical Sciences, Ulster University, Coleraine, Northern Ireland.

**Student Competition**

**14:07 OC14 Attitudes towards low and zero alcohol products amongst male students.** *S. Sheridan<sup>1</sup> and G.J. Cuskelly<sup>2</sup>* 1. S. Sheridan, Registered Associate Nutritionist, BSc Nutrition and Health Science (2024), Technological University of the Shannon, Athlone, Co. Westmeath, Ireland and 2. Dr G.Cuskelly SRD, BSc, PhD Lecturer in Nutrition (Dept of Sport & Health Science), Principal Investigator (TUS SHE Research Centre) in the Technological University of the Shannon, Athlone, Co. Westmeath, Ireland.

**Student Competition**

**14:15 OC15 Nutrition for Life: A collaborative and community engagement approach to developing a whole-school food and nutrition policy.** *N. McGee<sup>1</sup> and M. McLoone<sup>2</sup>* 1. Carndonagh Community School, Carndonagh, Co. Donegal and 2. Department of Health & Nutritional Sciences, Atlantic Technological University, Ireland.

**Student Competition**

**14:30 OC16 Exploring the use of primary care services by participants with metabolic syndrome: secondary analysis of TILDA.** *J. Whelan<sup>1</sup>, M. McDonnell-Naughton<sup>2</sup> and G. J. Cuskelly<sup>1</sup>* 1. Department of Sport & Health Science, Technological University of the Shannon Midlands, Ireland and 2. Department of Nursing, Technological University of the Shannon Midlands, Ireland.

**Student Competition**

**14:37 OC17 Quality and accuracy of complementary feeding information online: a cross-sectional content analysis of Instagram posts.** *A. Rafter<sup>1,2</sup>, E. Proctor<sup>1,2</sup>, M. Conway<sup>1</sup>, M K. Fialkowski<sup>3</sup>* 1. School of Biological, Health and Sports Sciences, Technological University Dublin, Dublin, Ireland, 2. School of Medicine, Trinity College

*Dublin, Dublin, Ireland and 3. Nutrition Support Shared Resources, University of Hawaii Cancer Center, Honolulu, Hawaii.*  
**Student Competition.**

- 14:45 OC18 The impact of one-to-one peer support on mothers' breastfeeding goals and maternal wellbeing: a scoping review.**  
*Khayla Timothy<sup>1</sup>, EJ O'Sullivan<sup>2</sup> and Á. O'Connor<sup>1</sup>* 1. SHE Research Centre, Department of Sport & Health Sciences, Faculty of Science and Health, Technological University of the Shannon, Ireland and 2. School of Biological, Health and Sports Sciences, Technological University Dublin, Ireland.  
**Student Competition**
- 14:52 OC19 Beyond folic acid – what is the nutritional content of fertility and pregnancy supplements on the Irish market?** *N. Yep<sup>1,2</sup>, A. Dunphy<sup>1</sup>, C. Erraught<sup>1</sup>, L. Farrell<sup>1</sup>, S. Fox<sup>1</sup>, C.B. O'Donovan<sup>1</sup>* 1. The Food Safety Authority of Ireland, Dublin 1, Ireland and 2. School of Biological Health & Sports Sciences, Technological University Dublin, Dublin 7, Ireland.  
**Student Competition**
- 15:00 OC20 Compare adherence to ESPEN recommendations for Oncology Patients at the Oncology Unit Cavan Monaghan Hospital (CMH), Cavan.** *M. Brady<sup>1</sup>, B. Mallon Moore<sup>1</sup>, M. Gilmartin<sup>1</sup>* 1. Cavan Monaghan Hospital, Lisdarn, Co.Cavan.
- 15:07 OC21 Assessing diet quality of Irish children aged 8-11 years old using the KidDASH score: how healthy and environmentally sustainable are children's diets?** *M C Conway<sup>1,2</sup>, J M Harrington<sup>3</sup>, S N McCarthy<sup>2</sup>* 1. School of Biological, Health and Sports Sciences, Technological University Dublin, Dublin, Ireland, 2. Department of Agrifood Business and Spatial Analysis, Teagasc Food Research Centre, Dublin, Ireland and 3. School of Public Health, University College Cork, Cork, Ireland.

## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

### Poster Session One

Room: CQ008

Time: 13:30 – 15:30

- 13:30    OC22    Assessing the feasibility of food-based guidelines for homeless services. D. Ravikumar-Grant<sup>1</sup> and C. Kelly<sup>1</sup>. Discipline of Health Promotion, University of Galway, Galway Rd, Galway, Ireland. Student Competition**
- 13:37    OC23    Evaluating nutritional quality, extent of processing and front-of-package claims: An audit of toddler-specific foods available in Irish supermarkets. M. Murray<sup>1</sup>, G. McMonagle<sup>1</sup> and B. Power<sup>1</sup>. Department of Health and Nutritional Sciences, Atlantic Technological University, Sligo, Ireland. Student Competition**
- 13:45    OC24    Environmental impact of food consumption and sociodemographic factors in Northern Norway through an intersectional lens. B. Kucuk<sup>1</sup>, C. Rylander<sup>1</sup>, M.H. Carlsen<sup>2</sup>, M.W. Lundblad<sup>1</sup>, L.F. Andersen<sup>2</sup>, G. Skeie<sup>1</sup>. Department of Community Medicine, Faculty of Health Sciences, UiT the Arctic University of Norway, Tromsø 9019, Norway and 2. Department of Nutrition, Institute of Basic Medical Sciences, Faculty of Medicine, University of Oslo, Oslo 0316, Norway. Student Competition**
- 13:52    OC25    Assessing the impacts of current Irish dietary patterns through a One Health lens. D.T. Burke<sup>1,2</sup>, P. Hynds<sup>1</sup>, A. Priyadarshini<sup>1,3</sup>. Environmental Sustainability & Health Institute, Technological University Dublin, D07 EWV4 Dublin, Ireland, 2. School of Business, Technological University Dublin, Aungier Street, Dublin 2, Ireland and 3. School of Business, Maynooth University, Maynooth, Co. Kildare, Ireland.**
- 14:00    OC26    Glycaemic control in the first 12 months post-diagnosis with Type 1 Diabetes in paediatric service users who commenced insulin to carbohydrate ratios and carbohydrate counting at diagnosis. M. Gallagher<sup>1,2</sup>, A. Bennett<sup>1</sup>, L. Kelly<sup>3</sup>. Discipline of Clinical Medicine, Trinity Centre for Health Sciences, St James'**

*Healthcare Campus, Dublin 8, Ireland, 2. School of Biological and Health Sciences, Technological University of Dublin - City Campus, Central Quad, Grangegorman, Dublin 7, Ireland and 3. Department of Nutrition and Dietetics, Midlands Regional Hospital Portlaoise, Dublin Road, Portlaoise, Laois, Ireland.*  
**Student Competition**

**14:07 OC27 Food additive usage in Irish food products, baseline data from the Irish National Food Ingredients database.** *K. Hynes<sup>1</sup>, J. Walton, A.P Nugent and B.A McNulty* 1. UCD Institute of Food and Health, School Agriculture & Food Science, University College Dublin, Belfield, Dublin, Ireland, 2. Department of Biological Sciences, Munster Technological University, Cork, Ireland and 3. Institute for Global Food Security, School of Biological Sciences, Queens University Belfast, Belfast, Northern Ireland.

**Student Competition**

**14:15 OC28 Current dietary iodine intakes of Irish adults: results from the National Adult Nutrition Survey II.** *A. Murtagh<sup>1</sup>, K. Dunne<sup>1</sup>, M. Buffin<sup>1</sup>, L. Kehoe<sup>2</sup>, E. O'Sullivan<sup>2</sup>, A. Flynn<sup>3</sup>, J. Kearney<sup>4</sup>, J. Walton<sup>2</sup>, and B. McNulty<sup>1</sup>* 1. UCD Institute of Food and Health, University College Dublin, Dublin, Ireland, 2. Department of Biological Sciences, Munster Technological University, Cork, Ireland, 3. School of Food and Nutritional Sciences, University College Cork, Ireland and School of Biological & Health Sciences, Technological University Dublin, Dublin, Ireland.

**14:30 OC29 The impact of the involvement in food growing on biodiversity knowledge & behaviours.** *M. Mahroug<sup>1</sup>, M. Walker<sup>2</sup> and A. Moore Heslin<sup>3</sup>* 1. School of Biological, Health, and Sports Sciences, Technological University Dublin, Grangegorman, D07 EWW4 Dublin, Ireland, 2. School of Agriculture and Food Science, University College Dublin, Belfield, D04 V1W8 Dublin, Ireland and 3. Airfield Estate, Overend Way, Dundrum, D14 EE77 Dublin, Ireland.

**Student Competition**

**14:37 OC30 Parental knowledge of, attitudes toward, and adherence to the FSAI supplementation and food-based recommendations for iron in small-for-age toddlers: a pilot study.** *O. Eslami, GJ. Cuskelly, and Á.O'Connor* 1. SHE Research Centre, Department of Sport & Health Sciences, Faculty of Science and Health,

- 14:45 OC35 Advancing sustainability in dietetic practice-education: perceptions of dietitian educators.** S. Browne,<sup>1,2</sup> L. Haydon,<sup>1</sup> and K. O'Driscoll.<sup>1</sup> 1. School of Public Health, Physiotherapy & Sports Science, University College Dublin, Ireland and 2. Institute of Food and Health, University College Dublin, Ireland.  
**Student Competition**
- 14:52 OC36 The effect of phenotypic factors on gut transit time and stool consistency in those with self-reported gastrointestinal symptoms.** B. Finnerty,<sup>1,2,3</sup> M. Rooney,<sup>1,3</sup> É. Gregory,<sup>1,3</sup> G. Bennett,<sup>1,3</sup> C. Ní Chonnacháin,<sup>1,3</sup> C. Carey,<sup>1,2</sup> A. Lucey,<sup>1,2</sup> E. L. Feeney.<sup>1,3</sup> 1. Food for Health Ireland, University College Dublin, 4, Dublin, Ireland, 2. School of Food and Nutritional Sciences, University College Cork, Cork, Ireland and 3. Institute of Food and Health, School of Agriculture and Food Sciences, University College Dublin, Dublin, Ireland.
- 15:00 OC37 Feasibility and acceptability of integrating the PortionSizeEd mobile app into the SNAP-Ed curriculum among adolescents in Hawai'i: A pilot study.** Emerald Proctor<sup>1,2</sup>, Kiari H. L. Aveiro<sup>3</sup>, Ian Pagano<sup>3</sup>, Lynne R. Wilkens<sup>3</sup>, Leihua Park<sup>4</sup>, Leilani Spencer<sup>4</sup>, Jeannie Butel<sup>4</sup>, Corby K. Martin<sup>5</sup>, John W. Apolzan<sup>5</sup>, Rachel Novotny<sup>4</sup>, John Kearney<sup>1</sup>, Chloe P. Lozano<sup>3</sup> 1. School of Biological, Health and Sports Sciences Technological University Dublin, Ireland, 2. School of Medicine Trinity College Dublin, Ireland, 3. University of Hawai'i Cancer Center, USA, 4. University of Hawai'i at Manoa, USA and 5. Pennington Biomedical Research Center, USA.  
**Student Competition**
- 15:07 OC38 Dietitians' attitudes to omega-3 supplementation in adult clinical practice.** J. Boland<sup>1</sup>, N. McGettigan<sup>2</sup>, J.L. O'Neill<sup>2</sup>, J. Hovey<sup>2</sup>, K. Mohadawoo<sup>2</sup> 1. University College Dublin, Ireland and 2. Danone Nutricia, Dublin, Ireland.  
**Student Competition**
- 15:15 OC39 Salt intakes in adults in Ireland: compliance with recommendations and key food sources.** Janette Walton<sup>1</sup>, Emma O'Sullivan<sup>1</sup>, Maria Buffin<sup>2</sup>, Breige A McNulty<sup>2</sup>, John M Kearney<sup>3</sup>, Albert Flynn<sup>4</sup> and Laura Kehoe<sup>1,4</sup> 1. Department of

*Biological Sciences, Munster Technological University, Cork, Ireland 2. Institute of Food and Health, University College Dublin, Belfield, Dublin 4, Ireland 3. School of Biological, Health & Sport Sciences, Technological University Dublin, Dublin, Ireland and 4. School of Food and Nutritional Sciences, University College Cork, Ireland.*



## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

### Oral Session Two

Room: Intel Auditorium

Time: 16:00 – 17:00

- 16:00      OC31      Consumer intentions to consume vitamin D fortified foods: A role for developing and communicating a national fortification strategy.** *S.N. McCarthy<sup>1</sup>, L. McGuinness<sup>1</sup>, M. McCarthy<sup>2</sup>, M.E Kiely<sup>3</sup>* 1. Department of Agrifood Business, Teagasc Food Research Centre, Dublin, Ireland, 2. Department of Management & Marketing, Cork University Business School, University College Cork, Ireland and 3. Cork Centre for Vitamin D and Nutrition Research, School of Food and Nutritional Sciences, University College Cork, Cork, Ireland.
- 16:15      OC32      A qualitative study to identify barriers and enablers to integrating sustainable Food systems on nutrition and dietetics curricula in higher education in Ireland.** *N. Wu<sup>1</sup>, J. Kinghan<sup>1</sup> and S. Browne<sup>1,2</sup>* 1. School of Public Health, Physiotherapy & Sports Science, University College Dublin, Ireland and 2. Institute of Food and Health, University College Dublin, Ireland.  
**Student Competition**
- 16:30      OC33      How well do baby and toddler foods meet Ireland's first reformulation targets?** *O.C. Lyons<sup>1</sup>, G. O'Shaughnessy<sup>1</sup>, A. McCann<sup>1</sup>, M.A.T. Flynn<sup>1,2</sup>, and S. O'Mahony<sup>1,3</sup>* 1. Food Safety Authority of Ireland, Dublin, Ireland, 2. Ulster University, Coleraine, UK and 3. Institute of Food and Health, University College Dublin, Dublin, Ireland.
- 16:45      OC34      What's in a meal: preliminary findings on the energy density of children's meals in the Irish foodservice sector.** *C. Dunne<sup>1</sup>, G. O'Shaughnessy<sup>1</sup>, A. McCann<sup>1</sup>, O. C. Lyons<sup>1</sup>, S. O' Mahony<sup>1,2</sup>* 1. Food Safety Authority of Ireland, Dublin, Republic of Ireland and 2. Institute of Food and Health, University College Dublin, Dublin, Ireland.

## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

### Poster Session Two

Room: CQ008

Time: 16:00 – 17:00

- 16:00 OC40 Dietary fibre intakes in adults in Ireland: key sources and compliance with recommendations.** *Janette Walton<sup>1</sup>, Maria Buffini<sup>2</sup>, Emma O'Sullivan<sup>1</sup>, Breige A McNulty<sup>2</sup>, John M Kearney<sup>3</sup>, Albert Flynn<sup>4</sup> and Laura Kehoe<sup>1,4</sup>* 1. Department of Biological Sciences, Munster Technological University, Cork, Ireland, 2. Institute of Food and Health, University College Dublin, Belfield, Dublin 4, Ireland, 3. School of Biological, Health & Sport Sciences, Technological University Dublin, Dublin, Ireland and 4. School of Food and Nutritional Sciences, University College Cork, Ireland.
- 16:07 OC41 Physical activity levels among patients with type 2 diabetes at primary health care centres in Copiapó, Chile: A cross-sectional study.** *Sergio Jiménez-Torres<sup>1</sup>, José C. Fernández-Cao<sup>2</sup>, Joanna Rojas-Calisto<sup>2</sup>, Francisco Vega-Ortiz<sup>3</sup>, Antonia López-Saldivar<sup>3</sup> Noemí Varas-Campos<sup>4</sup>, Paulina Godoy-Adaros<sup>4</sup>, Carolina Rojas- Torrejón<sup>5</sup>* 1. Department of Kinesiology, Faculty of Health Sciences, University of Atacama, Copiapó, Chile, 2. Department of Nutrition and Dietetics, Faculty of Health Sciences, University of Atacama, Copiapó, Chile, 3. Bachelor's Degree in Kinesiology, Faculty of Health Sciences, University of Atacama, Copiapó, Chile, 4. Bachelor's Degree in Nutrition and Dietetics, Faculty of Health Sciences, University of Atacama, Copiapó, Chile and 5. CODIACO Study, University of Atacama, Copiapó, Chile.
- 16:15 OC42 Food supplement use in adults in Ireland: Prevalence and types and compliance with nutrient specific supplement recommendations.** *L Kehoe<sup>1,2</sup>, M Buffini<sup>3</sup>, E O'Sullivan<sup>1</sup>, B.A. McNulty<sup>3</sup>, J.M. Kearney<sup>4</sup>, A Flynn<sup>2</sup> and J Walton<sup>1</sup>* 1. Department of Biological Sciences, Munster Technological University, Cork, Ireland, 2. School of Food and Nutritional Sciences, University College Cork, Ireland, 3. Institute of Food and Health, University College Dublin, Belfield, Dublin 4, Ireland and 4. School of Biological, Health & Sport Sciences, Technological University Dublin, Dublin, Ireland.

- 16:22 OC43 Knowledge, awareness and behaviours regarding dietary guidelines for fish consumption among pregnant and breastfeeding women in the UK and Ireland.** *N. Mackay<sup>1</sup>, B. Muki<sup>1</sup>, E.M. McSorley<sup>1</sup>, M.S. Mulhern<sup>1</sup>, P.J. Allsopp<sup>1</sup>, J.J. Strain<sup>1</sup> and A.J. Yeates<sup>1</sup>* **1.** *Nutrition Innovation Centre for Food and Health (NICHE), Ulster University, Coleraine, Northern Ireland.*
- 16:30 OC44 Associations between dietary scores and metabolic health 10 years after pregnancy: Findings from the ROLO longitudinal birth cohort study.** *Emmanuella Oluwaferanmi Akinsooto (UCD Precision Medicine MSC student)<sup>1</sup>, Sophie Callanan<sup>1</sup>, Fionnuala McAuliffe<sup>1</sup>* **1.** *UCD Perinatal Research Centre, School of Medicine, University College Dublin, National Maternity Hospital, Dublin, Ireland and 2. School of Medicine, University College Dublin, Ireland.*  
**Student Competition**
- 16:37 OC45 Beneficial effect of tributyrin and tripropionin on colitis is mediated by modulation of gut microbiota.** *Z.Y. Chen<sup>1,\*</sup>, S. Huang,<sup>1</sup> and W. He,<sup>2</sup>* **1.** *School of Life Sciences, The Chinese University of Hong Kong, Shatin, NT, Hong Kong, China and 2. School of Food and Biological Engineering, Jiangsu University, 301 Xuefu Road, Zhenjiang 212013, Jiangsu, China.*
- 16:45 OC46 The impact of the COVID-19 pandemic on women's breastfeeding experience within the irish healthcare system.** *A.Bacon<sup>1</sup>, E.J.Osullivan<sup>1</sup>* **1.** *School of Biological, Health, and Sports Sciences, Technological University Dublin, Grangegorman Campus, Grangegorman Lower, Dublin 7.*  
**Student Competition**
- 16:52 OC47 Exploring the relationship between involvement in community gardening and consumption of organic, local and seasonal foods.** *Anya Ritchie<sup>1</sup>, Ada Chan<sup>2</sup>, Aoibhín Moore Heslin<sup>3</sup>* **1.** *School of Agriculture and Food Science, University College Dublin, Belfield, D04 V1W8 Dublin, Ireland, 2. School of Biological, Health, and Sports Sciences, Technological University Dublin, Grangegorman, D07 EWW4 Dublin, Ireland and 3. Airfield Estate, Overend Way, Dundrum, D14 EE77 Dublin, Ireland.*  
**Student Competition**

**DAY TWO**  
**THURSDAY 12 JUNE**

**Postgraduate Symposium**

*Intel Auditorium*

**09:00 Weight gain during pregnancy: an update on current challenges and practical considerations**

*Rachel Nolan, Ulster University, Northern Ireland*

**09:25 Appetite for change - The urgent need to revisit malnutrition screening in oncology**

*Clodagh Scannell, University College Cork, Ireland*

**09:50 B vitamins, immune function and the ageing brain: A critical review of the evidence, mechanisms and potential role of the gut microbiome**

*Umair Shabbir, Ulster University, Northern Ireland*

**10:15 The role of digital nutrition interventions for individuals with severe mental illness: insights, challenges and future directions**

*Ciara O'Sullivan, Munster Technological University, Ireland*

**10:40 Refreshment Break**

*Central Quad Foyer*

**The Julie Wallace Award Lecture**

*Intel Auditorium*

**11:00 Nutrition in cancer survivorship – bridging the evidence-practice gap**

*Dr Laura Keaver, Atlantic Technological University, Ireland*

**11:45 Original Communication Session Three**

*OC48 – OC53, Intel Auditorium*

*OC54 – OC62, CQ007*

*OC63 – OC71, CQ008*

**13:15 Lunch Break**

*Central Quad Foyer*

**13:30 Annual Section Meeting**

*This meeting is open to all Irish Section members of The Nutrition Society  
Intel Auditorium*

**Symposium Two: Sustainable strategies for optimal nutrition**

*Intel Auditorium*

**14:20 Are we missing opportunities to promote healthy and sustainable meals?**

*Professor Jeff Brunstrom, University of Bristol, UK*

**15:00 Using mixed methods research to understand food environments in Sri Lanka and Tanzania**

*Professor Nicholas Nisbett, Institute of Development Studies. Food Equity Centre, UK*

**15:40 Refreshment Break**

*Central Quad Foyer*

**16:00 Processing plant proteins for food: navigating the balance between nutrition and sustainability**

*Associate Professor Iben Lykke Petersen, University of Copenhagen, Denmark*

**16:40 Environmentally sustainable nutrition for older adults**

*Professor Peter Weijjs, Amsterdam University of Applied Sciences, The Netherlands*

**17:20 Closing Remarks**

**19:30 Conference Dinner**

*Harbourmaster Bar & Restaurant Customs House Dock  
Pre-registration is required to join this event.*

## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

### Oral Session Three

Room: Intel Auditorium

Time: 11:45 – 13:15

- 11:45      OC48      Hydration in ileostomates: knowledge, attitudes and practice.**  
N. Magee<sup>1</sup>, E.J. Rosbotham<sup>1</sup>, L.K. Pourshahidi<sup>1</sup>, P. Douglas<sup>1</sup>, V. Gilpin<sup>2</sup>, E.E.A. Simpson<sup>3</sup>, J. Davis<sup>2</sup>, C.I.R. Gill<sup>1\*</sup> *1. Nutrition Innovation Centre for Food and Health (NICHE), Ulster University, Coleraine, Northern Ireland, UK, 2. School of Engineering, Ulster University, Belfast, Northern Ireland, UK and 3. School of Psychology, Ulster University, Coleraine, Northern Ireland, UK.*  
**Student Competition**
- 12:00      OC49      Area-level socioeconomic deprivation, B-vitamin status, and cognitive function in older Irish adults: observational analysis on a North-South ageing cohort.** S.L Haggerwood<sup>1</sup>, L. Hoey<sup>1</sup>, A. Moore<sup>2</sup>, C. Hughes<sup>1</sup>, M. Ward<sup>1</sup>, H. McNulty<sup>1</sup> *1. Nutrition Innovation Centre for Food and Health, Ulster University, Coleraine, Northern Ireland and 2. School of Geography and Environmental sciences, Ulster University, Coleraine, Northern Ireland.*  
**Student Competition**
- 12:15      OC50      Acute effects of combined inulin and nitrate supplementation on vascular function in hypertensive adults.** J. Virgili<sup>1</sup>, B. Bond<sup>1</sup>, A. Vanhatalo<sup>1</sup>, D. Vauzour<sup>2</sup>, G. Le Gall<sup>2</sup>, and L. Torquat<sup>1</sup> *1. University of Exeter Medical School, Faculty of Life and Health Sciences, University of Exeter, St Luke's Campus, Exeter, EX1 2LU, UK and 2. Norwich Medical School, Faculty of Medicine and Health Sciences, University of East Anglia, Norwich, NR4 7TJ, UK.*  
**Student Competition**
- 12:30      OC51      Alignment of the Planetary Health Diet with pregnancy dietary guidelines: insights from two cohorts.** Aoife Davis<sup>1</sup>, Sophie Callanan<sup>1</sup>, Gillian A. Corbett<sup>1,2</sup>, Eileen C. O'Brien<sup>1,3</sup>, Alexander Douglass<sup>1,4</sup>, Fionnuala M. McAuliffe<sup>1,2</sup> *1. UCD Perinatal Research Centre, UCD School of Medicine, University College Dublin, National Maternity Hospital, Dublin 2, Ireland, 2. National*

*Maternity Hospital, Dublin 2, Ireland, 3. School of Biological, Health and Sports Sciences, Technological University Dublin, Dublin 7, Ireland and 4. College of Health and Agricultural Sciences, University College Dublin, Ireland.*

**Student Competition**

- 12:45      OC52      Inadequate micronutrient intakes in children aged 2 years in the Cork BASELINE Cohort Study – A pilot analysis for the Zero\_HiddenHunger\_EU project.** *E. M. Creedon, Á. Hennessy, K. D. Cashman and M. E. Kiely<sup>1</sup>* 1. Cork Centre for Vitamin D and Nutrition Research, School of Food and Nutritional Sciences, University College Cork, Cork, Ireland.
- Student Competition**

- 13:00      OC53      The cholesterol-lowering effect of cheese compared to butter: does sex play a role in the LDL particle response to dairy fat?** *Martina Rooney,<sup>1,2</sup> Simone Dunne,<sup>1,2</sup> Fiona C McGillicuddy,<sup>3</sup> Eileen R Gibney,<sup>1,2</sup> Emma L Feeney.<sup>1,2</sup>* 1. Food for Health Ireland, University College Dublin, Dublin, Ireland, 2. UCD Institute for Food and Health, University College Dublin, Dublin, Ireland and 3. UCD Diabetes Complications Research Centre, University College Dublin, Dublin, Ireland.

## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

Poster Session Three

Room: CQ007

Time: 11:45 – 13:15

- 11:45      OC54      Assessing adherence to the Planetary Health Diet among Irish teenagers: preliminary analysis based on data from the National Teens' Food Survey II.** *P. van der Wel<sup>1</sup>, M. O'Neill<sup>1</sup>, Maria Buffini<sup>1</sup>, John Kearney<sup>2</sup>, Laura Kehoe<sup>3</sup>, J. Walton<sup>3</sup>, B. McNulty<sup>1</sup>* 1. UCD Institute of Food & Health, University College Dublin, Dublin, Ireland, 2. School of Biological & Health Sciences, Technological University Dublin, Dublin, Ireland and 3. Department of Biological Sciences, Munster Technological University, Cork, Ireland.  
**Student Competition**
- 11:52      OC55      Food literacy programmes targeted at preschool-aged children and their carers, an examination of their outcomes – a scoping review.** *A. Mc Donnell Gillic<sup>1</sup>, A. Kennedy<sup>1</sup>, J.M. Kearney<sup>1</sup>* 1. Faculty of Sciences and Health, School of Biological, Health and Sports Sciences, Technological University Dublin, Grangegorman, Dublin 7, D07 H6K8.  
**Student Competition**
- 12:00      OC56      Prevalence of appetite disorders in cancer survivors and associations with nutritional status and quality of life.** *L. Keaver* 1. The Health and Biomedical Strategic Research Centre (HEAL), Atlantic Technological University, Sligo, Ireland.
- 12:07      OC57      How did the Coronavirus disease lockdown disrupt glycaemic management in type 2 diabetics?** *M. Gallardo<sup>1</sup>, C. Doepping<sup>1</sup>, J. Rojas-Calisto<sup>1</sup>, S. Jimenez<sup>2</sup>* 1. Department of Nutrition and Dietetics, Faculty of Health Sciences, University of Atacama, Copiapó, Chile and 2. Department of Kinesiology, Faculty of Health Sciences, University of Atacama, Copiapó, Chile.
- 12:15      OC58      The prevalence of sarcopenia in a sub-acute respiratory rehabilitation inpatient unit.** *Alison Maughan<sup>1</sup>, Jennifer Reid<sup>1</sup>, Cíara Walsh<sup>2</sup>, Jaqueline Boyle<sup>2</sup>* 1. University College Dublin, Belfield, Dublin 4, Ireland and 2. Peamount Healthcare, Newcastle, Dublin.



## Student Competition

- 12:22 OC59 Milk feeding practices during hospitalisation and post-discharge: findings from a nutrition audit.** J. Santos<sup>1</sup>, A. Doolan<sup>2</sup>, F. Dunlevy<sup>3</sup>, S. Clancy<sup>1</sup>, J. Kearney<sup>1</sup>, A. Kennedy<sup>1</sup> *1. School of Biological, Health and Sports Sciences, Technological University Dublin, Dublin, Ireland, 2. Neonatal Department, The Coombe Hospital, Dublin, Ireland, and 3. Nutrition and Dietetics Department, The Coombe Hospital, Dublin, Ireland.*
- 12:30 OC60 Dining for Joint Health: A case study on the impact of anti-inflammatory foods on rheumatoid arthritis in an older adult.** John Carroll, Aoife E. McNamara *1. NutRI Research Group, Department of Biological Sciences, Munster Technological University, Cork, Ireland.*
- 12:37 OC61 Monitoring the marketing and promotion of commercial milk formulae in Irish retail stores.** L Kingkumar<sup>1</sup> and EJ O'Sullivan<sup>1</sup> *1. School of Biological, Health and Sports Sciences, Technological University Dublin, Grangegorman, Dublin 7.*
- 12:45 OC62 Diet and Oral Health of Elite Irish Athletes.** J. Reid<sup>\*1</sup>, C. Barrett<sup>\*1</sup>, P. Elliott<sup>1</sup>, A. Hughes<sup>2</sup>, M. O'Sullivan<sup>2</sup>, L. Winning<sup>2</sup>, O. Cassetti<sup>2</sup>, S. Madigan<sup>3</sup>, B. Egan<sup>4</sup>, M. Crowe<sup>2</sup>, A. O'Sullivan<sup>1</sup>. *\*Joint first authors 1. UCD Institute of Food and Health, UCD School of Agriculture and Food Science, University College Dublin, Dublin, Ireland, 2. Department of Restorative Dentistry & Periodontology, Dublin Dental University Hospital, Trinity College Dublin, Ireland, 3. Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland. Sport Ireland Institute, National Sports Campus, Abbotstown, Dublin, Ireland and 3. School of Health and Human Performance, Dublin City University, Dublin, Ireland.*
- Student Competition**

## ORIGINAL COMMUNICATIONS SESSION - RUNNING ORDER

### Poster Session Three

Room: CQ008

Time: 11:45 – 13:15

- |       |      |  |
|-------|------|--|
| 11:45 | OC63 | <p><b>Strengthening professional networks in nutrition - evaluation of the NutriPD Community of Practice in Ireland.</b> <i>T. Cooley<sup>1</sup>, S. O'Donovan<sup>1</sup>, and L. Ryan<sup>1</sup></i> 1. Department of Sport, Exercise and Nutrition, Atlantic Technological University, Galway, Ireland.</p> <p><b>Student Competition</b></p>   |
| 11:52 | OC64 | <p><b>Influence of obesity on maternal anaemia and its consequences in pregnancy and postpartum: data from the Northern Ireland Maternity System (NIMATS).</b> <i>S.P. Demirdjian<sup>1</sup>, M.A. Kerr<sup>1</sup>, M.S. Mulhern<sup>1</sup>, P.D Thompson<sup>1</sup>, M. Ledwidge<sup>2</sup>, M.T. McCann<sup>1</sup></i> 1. Nutrition Innovation Centre for Food and Health; Ulster University, Coleraine, UK and 2. School of Medicine, University College Dublin, Ireland.</p> <p><b>Student Competition</b></p>   |
| 12:00 | OC65 | <p><b>Development and evaluation of an infographic designed to educate on healthy lifestyle behaviours to reduce risk of type 2 diabetes after gestational diabetes.</b> <i>R. Nolan<sup>1</sup>, L. McKnight<sup>2</sup>, A.M. Gallagher<sup>1</sup> and A.J. Hill<sup>1</sup></i> 1. Nutrition Innovation Centre for Food and Health, School of Biomedical Sciences, Ulster University, Coleraine, Northern Ireland and 2. Department of Nutrition and Dietetics, Northern Health and Social Care Trust, Antrim Area Hospital, Antrim, Northern Ireland.</p> <p><b>Student Competition</b></p> |
| 12:07 | OC66 | <p><b>The effect of inspiratory muscle training on the metabolic status and anthropometry of insulin resistant patients with obstructive sleep apnoea: a pilot investigation.</b> <i>T. Elshaafi<sup>1,2</sup>, O. O'Keeffe<sup>1</sup>, D.M.A. McCartney<sup>1</sup>, J.L. Fau<sup>2</sup></i> 1. School of Biological, Health and Sports Sciences, Technological University Dublin and 2. Department of Respiratory and Sleep Medicine, Connolly Hospital, Blanchardstown.</p> <p><b>Student Competition</b></p>   |
| 12:15 | OC67 | <p><b>Exploring the impact of medical nutrition therapy in gestational diabetes management: a secondary analysis of</b></p>  |

**the EMERGE trial.** S. O'Reilly<sup>1</sup>, D. O'Moore<sup>1</sup>, A. Alvarez-Iglesias<sup>2</sup>, F. Dunne<sup>2</sup> 1. School of Agriculture and Food Science, University College Dublin, Dublin, Ireland, and 2. School of Medicine, University of Galway, Galway, Ireland.  
**Student Competition**

**12:22 OC68 Effectiveness of a blended learning physical assessment training programme in adults to improve malnutrition diagnosis.** J. Cox<sup>1</sup>, C. A. Corish<sup>1</sup>, M. McKiernan<sup>2</sup>, C. O'Brien<sup>3</sup>, J. Feighan<sup>3</sup>, B. Gillman<sup>2</sup> and N. Dervan<sup>1</sup> 1. School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin, Ireland, 2. Department of Clinical Nutrition and Dietetics, Mater Misericordiae University Hospital, Dublin, Ireland and 3. Irish Nutrition and Dietetic Institute, Dublin, Ireland.  
**Student Competition**

**12:30 OC69 Diurnal trends in sodium, potassium, and sodium-to-potassium ratio in UK Adults: Insights from the National Diet and Nutrition Survey (NDNS).** C. Golland<sup>1</sup>, P. Heavey<sup>1</sup> and G. Cuskelly<sup>1</sup> 1. SHE (Sport, Health and Exercise) Research Centre, Department of Sport and Health Sciences, Technological University of the Shannon, Athlone, Ireland.  
**Student Competition**

**12:37 OC70 Partially replacing animal-based protein foods with plant-based protein foods: a systematic review of randomised controlled trials in healthy adult populations.** A. Courtney<sup>1,2</sup>, R. Sweeney<sup>1,2</sup>, B. McNulty<sup>1</sup>, M. Wallace<sup>1,2</sup>, L. Brennan<sup>1,2</sup> 1. School of Agriculture and Food Science, Institute of Food and Health, University College Dublin and 2. Conway Institute, University College Dublin.  
**Student Competition**

**12:45 OC71 Assessing the integration of nutrition education in healthcare curricula in Ireland.** By R. Peel<sup>1</sup>, S. O'Donovan<sup>1</sup>, A. Gillane<sup>1</sup>, and L. Ryan<sup>1</sup>. 1. Department of Sport, Exercise and Nutrition, Atlantic Technological University, Galway, Ireland.  
**Student Competition**

## **DAY THREE**

## FRIDAY 13 JUNE

**09:15**    **Welcome**  
*Central Quad Foyer*

**Symposium Three: Sustainable solutions: Charting policy paths to nutritional equity**  
*Intel Auditorium*

**09:30**    **Collaborating with ‘blue food’ system stakeholders to achieve optimal nutritional health and wellbeing in less affluent communities**  
*Associate Professor Clare Pettinger, University of Plymouth, UK*

**10:10**    **Effectiveness of a web-based dietary intervention program targeting young adults prior to parenthood: lessons learned from a randomised controlled trial**  
*Professor Nina Cecillie Øverby, University of Agder, Norway*

**10:50**    **Developing an infant and young child feeding in emergencies preparedness plan for the island of Ireland: a consensus study**  
*Dr Aileen Kennedy, Technological University Dublin, Ireland*

**11:30**    **Close of Conference**

## **SPEAKER SUMMARIES AND BIOGRAPHIES**

*\*Summaries and biographies are published as submitted.*

### **Nutrition and food behaviours of children and adolescents: a health promotion perspective**

*Professor Colette Kelly, University of Galway, Ireland*

#### **PRESENTATION SUMMARY**

Nutrition and food behaviours play a key role during child and adolescent development and impact health in both the immediate and long term. Cross-national and national dietary and health surveys clearly demonstrate that diet and food behaviours of children and adolescents are not optimal. Nutrition-related diseases such as obesity, and the rise in inequalities in obesity, are of concern in Ireland and globally. Food insecurity among families is also a pressing concern nationally and across Europe with an increase in prevalence attributed to the cost-of-living crisis, wars, immigration and the COVID-19 pandemic. The social determinants of health help to explain at least in part, why dietary and health inequalities exist yet the solutions to such inequity have been slow, delayed and difficult to implement. In health promotion, the Ottawa Charter includes five action areas to improve health and reduce inequalities and only one of these focuses on individual behaviour recognising that upstream approaches are key to enable and support behaviour change.

Two of these action areas will be discussed in relation to nutrition and food behaviours of children and adolescents; supportive environments for health and healthy public policy. In addition, participation, a principle underpinning Health Promotion, will be described with respect to involving children in efforts to improve their food behaviours and health for themselves and their peers. Youth participation in nutrition is limited but growing and the related challenges and opportunities to youth engagement in research will be described.

Supportive environments or settings for health include places where children live, learn, grow and play and typically include schools, clubs and places where they spend time with friends. Evidence suggests that schools, where children spend a considerable proportion of their time, are a key setting to improve dietary habits and diet-related diseases. The impact of food environments within and external to schools on dietary habits will be discussed alongside efforts to improve the foodscape that children and adolescents are exposed to. A growing concern that will be highlighted is 'holiday hunger' where children have limited access to quality food during out-of-school periods such as Summer and other term-time breaks.

Healthy public policies include the use of legislation, taxation and regulation to promote health. These can include universal provision of school meals and food marketing regulations; the latter of which are voluntary in Ireland and ineffective. Evidence suggests that universal school meal policies can reduce child food insecurity and absenteeism with improvements in diet quality and academic outcomes.

This presentation will adopt a health promotion perspective to nutrition and food behaviours of children and adolescents which facilitates an upstream approach to addressing social, structural and commercial determinants that influence diet and health.

## **BIOGRAPHY**

Colette is a Personal Professor of Health Promotion and Director of the Health Promotion Research Centre (HPRC), a WHO Collaborating Centre for Health Promotion Research at the University of Galway. Colette is a registered public health nutritionist (RNutr) and her research interests focus on addressing inequalities in health and nutrition across childhood and adolescence. Colette's research has covered the early years, middle childhood and adolescence, including different settings in which children grow, learn and play. Food environments are of particular interest including how these structural environments influence parents and children as they navigate through these environments making food choices. Colette uses a range of methodologies including mixed and creative research methods. Integral to her work is the participation of children, adolescents and parents in research that will affect them. Colette is the elected chair of the Youth Engagement Advisory Group for the international Health Behaviour in School-aged Children study that involves over 50 countries across Europe, central Asia and Canada.

## **The effect of lactation and weight loss on risk factors for cardiometabolic disease among postpartum women with overweight**

*Professor Hilde K Brekke, University of Oslo, Norway*

### **PRESENTATION SUMMARY**

Childbearing increases the risk of weight gain and cardiometabolic disease. The reset hypothesis suggests that lactation has protective cardiometabolic effects in the mother. The hypothesis is based on observational studies and the possible interacting role of weight loss needs to be elucidated.

In the EVA-study, we aimed to describe the effects of a breastfeeding promotion intervention (BPI) and an evidence-based dietary intervention for weight loss postpartum (Diet) on body weight and cardiometabolic risk factors at 6 months postpartum and post weaning as well as to examine possible interaction effects. We recruited 156 pregnant women with a pre-pregnancy BMI of 25-35 kg/m<sup>2</sup> and randomized them to four groups in a 2x2 factorial design: BPI, Diet, both treatments or no treatment. Measurements were made at 2 weeks postpartum, 6 months postpartum as well as post weaning. BPI consisted of individual counselling by a lactation consultant during pregnancy, at childbirth, and monthly or more frequently thereafter based on individual needs. Diet was initiated at 11 weeks postpartum. Body weight, body composition, waist- and hip circumference, markers of lipid and glucose metabolism and blood pressure were measured. We analysed main and interaction effects using 2-way ANCOVA adjusted for baseline values.

The short-term results showed high breastfeeding rates at 2 weeks (99%) and at 6 months postpartum (97%), independent of treatment group. Among the participants attending both visits (n = 108) mean (SD) self-reported pre-pregnancy BMI was 28.7 (2.6) kg/m<sup>2</sup> (range: 25.1 – 34.6 kg/m<sup>2</sup>) and baseline BMI was 30.7 (2.5) (range: 26.1 – 37.7) kg/m<sup>2</sup>. The BPI did not affect rates of exclusive or partial breastfeeding, age at introduction of complementary foods or have main effects on body weight or cardiometabolic risk factors. The Diet treatment reduced body weight by 3.4 kg, fasting serum insulin by 9.5 pmol/L and glucose by 0.16 mmol/L (all  $p \leq 0.03$ ). The Diet treatment also reduced fat mass, fat-free mass, percent fat mass and waist- and hip circumference (all  $p \leq 0.03$ ). There were no interactions between the treatments.

In the short-term (6 months postpartum), we found that there were no main effects of BPI on body weight, cardiometabolic risk factors, or rates of exclusive or partial breastfeeding, nor were there interactions between BPI and Diet for any outcome. The Diet treatment produced weight loss and improved body composition, waist- and hip circumference and fasting insulin and glucose levels. In populations with high breastfeeding rates, offering dietary counselling for weight loss may be one

way to improve risk factors for cardiometabolic disease without negatively impacting breastfeeding. Long-term (post-weaning) results from the EVA-study will be included at the Nutrition Society (Irish Section) conference.

## **BIOGRAPHY**

Hilde K. Brekke is a Professor at the Department of Nutrition, University of Oslo, Norway. She is a licensed clinical dietitian with a Ph.D. from the University of Gothenburg, Sweden. At the University of Oslo, she is the deputy head of the 5-year clinical nutrition education program. Her primary research areas include maternal health and the role of postpartum weight loss and lactation in preventing cardiometabolic disease. Brekke leads the research program 'Obesity and Cardiovascular Disease in Women After Childbearing,' conducted in collaboration with researchers at Cornell University, USA, and the University of Gothenburg, Sweden. This program encompasses both epidemiological research and randomized clinical trials. As part of this work, she conducted the study 'Are the Favorable Effects of Breastfeeding on Cardiometabolic Risk Factors Mediated via Weight Loss? The Randomized Controlled EVA-trial.'



## **Gut microbiota and its interaction with diet in the onset, propagation and management of non-communicable disease**

*Professor Konstantinos Gerasimidis, University of Glasgow, UK*

### **PRESENTATION SUMMARY**

In health, diet is the most potent regulator of a person's gut microbiota composition and function. Diet supplies nutrients to the gut microbiota for their growth and the latter reciprocates by producing important metabolites for host health.

In healthy individuals, diets rich in plant-based food and fibre (e.g. vegetarian or mediterranean type diet) increase the abundance of fibre degrading or fermenting organisms like *Faecalibacterium*, *Roseburia*, *Bifidobacterium* whereas Western type of diets have been associated with increases in *Propionibacterium* and *Bilophila* and in presumably harmful metabolites like hydrogen sulphide and trimethylamine. Currently, there is also a strong interest in the effect of food industrialisation and food additives, in particular, on the gut microbiome and host. In animal models and in-vitro certain food additives caused microbial dysbiosis and compromised gut barrier function, thus potentiating gut inflammation. Nonetheless, findings from preclinical research have not been confirmed within clinical trials or any positive signals observed were of modest size compared with those observed in preclinical experiments.

As not all individuals harbour the same type of microbes, it is logical to assume that the effects diet will have on the gut microenvironment and by extension to host health will vary too, and more so in conditions associated with microbial dysbiosis. For example, the in-vitro ability of fermentable fibre to modulate microbiome is diminished in patients with inflammatory bowel disease as compared to healthy controls, whereas unfermented fibre fuelled inflammation in select patients with the same condition, ex vivo.

In the causal pathway between microbiota causing disease, diet can hold several critical roles. Diet can confound the association between microbiota and development of disease, like in patients with coeliac disease on treatment with a gluten-free diet, where several of the alterations observed in the gut microbiome of the sufferers are attributed to their dietary habits. Microbiota may also promote or prevent the effect diet has on disease development, like with the effect of trimethylamine N-oxide production from bacterial metabolism of dietary choline on development of atherosclerosis and cardiovascular disease.

Microbiota-modifying dietary therapies have also been trialled alone or as adjunct to pharmacological agents to manage disease outcomes in patients with gastrointestinal diseases. Collectively, the literature suggests that the effectiveness

of dietary manipulation of the gut microbiome varies depending on the condition tested, even in conditions which are very similar and affect the same organ system. Remarkably, even within the same condition, the therapeutic outcome of a dietary intervention can depend on the pre-treatment microbiome signatures of individual patients. In irritable bowel syndrome, the efficacy of a low FODMAP diet in improving symptoms was more pronounced in patients who had a pathogenic microbial community as opposed to those whose microbiome profile was similar to that of unaffected healthy individuals.

Observations that response to drug therapies in the management of inflammatory bowel disease or cancer relates to pre-treatment microbiome signatures, most of which are diet-modifiable, opens new research opportunities to enhance effectiveness to drug therapies through microbiome pre-conditioning with dietary interventions.

## **BIOGRAPHY**

Professor Konstantinos Gerasimidis is Professor of Clinical Nutrition at the Human Nutrition Unit, School of Medicine, University of Glasgow and dietitian by training. Professor Gerasimidis has a 15 years research experience and a solid track record in paediatric IBD and nutrition-related research with a publication record of >155 peer-reviewed articles in high-profile journals in nutrition and/or gastroenterology. He was the first in the literature to use microbiome next-generation sequencing and metabolomics to show that the gut microbiota of children with Crohn's disease is suppressed and dysbiosis worsens during treatment with exclusive enteral nutrition, and these effects were paradoxically associated with improvement in disease activity and a decrease in faecal calprotectin. He subsequently made use of these observations to develop a new dietary therapy for active Crohn's disease (CD-TREAT), using ordinary table food. Professor Gerasimidis currently leads a research team of 9 PhD students, 8 postdoctoral researchers and 3 clinical research fellows, all funded by external grants. He has a cumulative research income of >£16M. His major ongoing research includes four multicentre RCTs in the UK which aim to innovate IBD management through dietary interventions. These include CD-TREAT as induction and maintenance therapy for Crohn's disease, combination treatment with biologics and partial enteral nutrition in Crohn's disease, and the effect of preoperative EEN in optimising perioperative outcomes in Crohn's disease. He leads a Class 2 lab with expertise in molecular microbiology and analytical chemistry.

## **Personalising the path to sustainable diets: supporting behaviour change across the life course**

*Associate Professor Aifric O'Sullivan, University College Dublin, Ireland*

### **PRESENTATION SUMMARY**

Transitioning to more sustainable healthy diets is essential to address human and planetary health. However, shifting dietary behaviours at scale remains a major public health challenge, particularly when such changes (for most) involve reducing animal-based foods and increasing plant-based foods. While dietary guidelines and sustainability metrics provide high-level direction, they often fail to account for the complexity and individuality of nutrient needs, dietary preferences and eating behaviours.

A personalised nutrition approach - that provides more targeted dietary advice based on individual biological, behavioural, and environmental factors - offers a promising strategy to support more effective and sustainable dietary behaviour change across the life course. This presentation will examine and discuss how a personalised approach can be used to design and deliver more sustainable healthy diets. Drawing on evidence from recent and ongoing research, we will examine the potential to reduce diet-related environmental impact, the subsequent impact on diet quality and nutrient intakes, as well as any potential impact on nutrient status and health biomarkers.

One key consideration as we move forward is how we address barriers to behaviour change in different population subgroups. Can we integrate behaviour-based phenotypes within our personalised nutrition approach to address life stage, environmental and socio-cultural contexts?

In summary, personalisation represents a promising pathway toward achieving sustainable healthy diets for all. However, its success will likely depend on embedding it within a behaviourally informed, culturally sensitive, and systems-level framework. This presentation will discuss evidence, implementation challenges, and opportunities to scale personalised nutrition strategies to support dietary transitions that are both health-promoting and environmentally sustainable.

### **BIOGRAPHY**

Dr Aifric O'Sullivan is an Associate Professor in Human Nutrition at University College Dublin (UCD), where she has been a faculty member since 2012. She also serves as Vice Principal for International in the UCD College of Health and Agricultural Sciences and leads research within the UCD Institute of Food and

Health. Her interdisciplinary work focuses on nutrition phenotyping and personalised strategies for sustainable, healthy diets across the lifespan. Dr O'Sullivan holds a PhD in Nutritional Metabolomics from UCD and completed postdoctoral research at the Foods for Health Institute, UC Davis. Her research integrates cutting-edge technologies to explore gene–diet–environment interactions and individual variability in response to dietary interventions. She leads major projects such as MyPlanetDiet and PLAN'EAT, which explore personalised nutrition approaches to reduce the environmental footprint of diets while maintaining nutritional adequacy. She has also made significant contributions to vitamin D research, showing how food-based strategies can improve status in vulnerable groups.

Aifric supervises a dynamic research team and has mentored graduates who now hold positions in academia and industry. A dedicated collaborator, she engages in international research consortia, policy advising (e.g., EASAC, European Commission), and public outreach through media, NGOs, and professional education. She is Associate Editor for multiple journals and an active member of the Nutrition Society. She represents UCD in international alliances like Una Europa and has led research infrastructure and capacity-building efforts that support both scientific advancement and societal impact.

## **Weight gain during pregnancy: an update on current challenges and practical considerations**

*Rachel Nolan, Ulster University, Northern Ireland*

### **PRESENTATION SUMMARY**

Pregnancy is an important time physiologically whereby changes in body weight and adiposity occur (1). Whilst adequate gestational weight gain (GWG) is required for healthy foetal growth, excessive weight gain has been linked with adverse effects including increased risk of postpartum weight retention and development of gestational diabetes (2). Currently there are no GWG guidelines in the UK, as reiterated in the recent NICE guidelines (3), therefore women are not routinely weighed throughout pregnancy. However, many countries do refer to US guidelines from the National Academy of Medicine (NAM) (previously known as the Institute of Medicine) (4) which utilise pre-pregnancy BMI as the determinant for how much weight a woman should gain during pregnancy. Based on NAM guidelines, almost 50% of women in the UK gained excessive gestational weight, with over 70% retaining that weight postpartum (5).

To obtain an accurate GWG profile the ideal measurements include a measured pre-pregnancy weight and the last available weight before delivery (4). However, there are several practical challenges associated with obtaining these weights, meaning estimated or recalled weights are often used. Furthermore, there is no agreed gestational age for the final weight measurement which makes comparing women's GWG difficult. Prior to the 1990s, routine weighing had been part of clinical practice but was phased out due to reports that it caused anxiety to pregnant women (6), however recent findings indicate most women no longer hold this view and would prefer to have guidance on the topic both during and post-pregnancy (7). However, due to barriers including lack of information and no set GWG guidelines within the UK, health professionals are less likely to raise the topic of weight (8). Pre-pregnancy BMI is a major determinant for adverse pregnancy outcomes and NICE guidelines do advise women to enter pregnancy at a healthy weight. A recent study suggested that excessive GWG does not have a direct effect on pregnancy outcomes and therefore pre-pregnancy BMI should be the focus (9). However, the long-term effects of excess GWG also need to be considered where it has been shown that those who gain above the recommended NAM guidelines have a higher BMI (10) and higher risk of obesity in the long-term after pregnancy (11). This supports that GWG should be monitored for all women to avoid excessive weight gain, however GWG guidelines do need to be considered. From a research perspective since routine weighing isn't current practice, there is a lack of UK data available to analyse GWG which is further compounded by inherent challenges when measuring GWG, meaning relevant guidelines can be challenging to investigate. Interventions aimed at preventing excessive GWG focus mainly on diet

and/or exercise changes and whilst some interventions are successful in reducing GWG, the long-term effects do require more research.

This review will explore the key factors contributing to excessive GWG and evaluate practical considerations in relation to its measurement. This will highlight the strategies used to monitor and evaluate GWG and how these can be best implemented within clinical practice to ensure optimal perinatal outcomes.

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## **BIOGRAPHY**

Rachel Nolan is a Registered Associate Nutritionist and a third year PhD researcher at Ulster University, working within the Nutrition Innovation Centre for Food and Health (NICHE). Her PhD focuses on weight management both during and post pregnancy for women both with and without gestational diabetes mellitus. Using a mixed methods approach her research aims to enhance understanding and inform strategies for improved maternal weight management.

Rachel's interest in research in the area of nutrition, and more specifically pregnancy, began during her placement year of her BSc Human Nutrition degree when she worked as a research assistant within NICHE on the OptiPREG observational study and randomised controlled trial. On completion of her BSc Human Nutrition degree at Ulster University, Rachel worked within the food industry as a Quality Assurance Auditor, before returning to academia to pursue her

true passion within research by embarking on a PhD under the supervision of Dr Alyson Hill and Professor Alison Gallagher.

Rachel is an active member of the Nutrition Society, where she has presented her work at multiple Irish Section Postgraduate conferences, Irish Section conferences and the Nutrition Society Congress. She remains dedicated to advancing research in maternal nutrition, weight management and contributing to evidence-based strategies for pregnancy and postpartum health.

## **Appetite for change - The urgent need to revisit malnutrition screening in oncology**

*Clodagh Scannell, University College Cork, Ireland*

### **PRESENTATION SUMMARY**

Cancer-associated malnutrition is highly prevalent, affecting up to 87% of oncology patients depending on tumour type and disease stage. Unlike general malnutrition, it is driven by chronic systemic inflammation, which contributes to muscle loss, abnormal body composition, and symptoms such as fatigue and anorexia that further reduce nutritional intake.

It is now recognised that all cancer patients are inherently 'at risk' of malnutrition, making common screening tools insufficient. Traditional tools that rely heavily on weight and body mass index (BMI) are not well-suited to oncology patients. High fat stores can mask muscle wasting, leading to misinterpretation and delayed referrals to dietetic services. Even among those with metastatic disease, 40–60% of patients are overweight or obese. Basic anthropometric measurements often fail to detect hidden malnutrition, which is frequently under-recognised by healthcare professionals.

Despite its debilitating consequences, there was, until recently, no global consensus on how best to diagnose malnutrition. The Global Leadership Initiative on Malnutrition (GLIM) criteria now provides a standardised approach, requiring the presence of at least one phenotypic (weight loss, low BMI, reduced muscle mass) and one aetiological (disease burden/inflammation, reduced intake/assimilation) criterion for diagnosis. GLIM incorporates both objective and subjective measures of muscle mass, improving generalisability across clinical settings.

Despite its clinical relevance, GLIM remains under-utilised—potentially due to the perceived time burden of assessment and limited dietetic staffing. It is essential that healthcare professionals recognise the severe consequences of hidden cancer-associated malnutrition and prioritise early identification and referral to dietetic services. Delayed dietetic care may also contribute to the widespread use of non-evidence-based dietary and supplement practices observed in cancer survivors. Some of these products have the potential to interact with conventional treatments and cause harm.

There is an urgent need for an oncology-specific malnutrition screening tool that moves beyond weight and BMI to better detect hidden malnutrition and support timely intervention for improved outcomes.



## BIOGRAPHY

Clodagh graduated from University College Cork in 2018 with a BSc (Hons) degree in Nutritional Science. She then completed her MSc in Human Nutrition and Dietetics at the University of Limerick, where she graduated top of her class and received the Graduate of the Year award from the Irish Nutrition and Dietetic Institute (INDI). Clodagh is a member of the Nutrition Society.

Clodagh is currently undertaking her PhD at University College Cork under the supervision of Prof Aoife Ryan and Dr Erin Sullivan. Clodagh's PhD is entitled '*Nutritional Studies in Ambulatory Oncology Patients: Impact of malnutrition on survival, patient beliefs, debunking myths, and a novel targeted intervention to attenuate nutritional decline*'. During her PhD she conducted clinical trials with the aim of improving the nutritional status of patients on chemo(immuno)therapy using novel, high protein, high calorie oral nutritional supplements enriched with omega-3 polyunsaturated fatty acids and vitamin D. Clodagh is also trained in computed tomography (CT) analysis of body composition which she has used to establish the prevalence of malnutrition using the Global Leadership Initiative on Malnutrition (GLIM) criteria. Clodagh has a keen interest in the use of biologically-based complementary and alternative medicine among cancer survivors, and has been involved in many initiatives to stop the spread of nutrition and cancer misinformation. She is a co-author on the book '*The Truth Behind Food and Cancer*' which is an educational, evidence-based resource that is freely available for patients who have been diagnosed with cancer.

## **B vitamins, immune function and the ageing brain: A critical review of the evidence, mechanisms and potential role of the gut microbiome**

*Umair Shabbir, Ulster University, Northern Ireland*

### **PRESENTATION SUMMARY**

Ageing affects physiological and immunological systems and is associated with changes in the composition and functions of the gut microbiome that can increase susceptibility to ill-health and disease<sup>(1)</sup>. By 2050, the number of people aged  $\geq 60$  years is predicted to be 2.1 billion<sup>(2)</sup>, placing considerable burdens on health care systems, economies and society worldwide. To help promote healthy ageing and reduce these burdens, a deeper understanding of the role of nutritional factors and their interactions with the gut microbiome and immune function is required. Of note, evidence suggests that folate and the related B-vitamins (B12, B6 and riboflavin) required for one-carbon metabolism are protective against cognitive dysfunction<sup>(3)</sup>, a relationship that may be mediated by both the gut microbiome and immune function<sup>(4)</sup>. This review will discuss the role of B-vitamins in the ageing brain and the complex interrelationships between the gut microbiome and immunity in modulating this relationship.

Randomised controlled trials provide strong evidence that intervention with B-vitamins (folic acid, B12 and B6) helps to maintain cognitive health in older adults<sup>(5)</sup>. There is also emerging evidence from *in vitro* and animal studies indicating that dietary intake of B-vitamins or supplements can beneficially modify the gut microbiota composition and its metabolites<sup>(6,7)</sup>. However, some such studies report no benefits, and the limited evidence from studies in humans tend to focus on riboflavin supplementation at high doses<sup>(8)</sup>. Furthermore, although it is recognised that specific gut microbes can synthesis B-vitamins, particularly riboflavin<sup>(9)</sup>, it is unknown whether this source can contribute to host requirements and status. As regards inflammation, many observational studies report that lower B-vitamin status, especially vitamin B6, is associated with a worse inflammatory state. Our report from the Trinity-Ulster-Department of Agriculture (TUDA) ageing cohort study confirms this finding, in that plasma pyridoxal-5-phosphate concentrations were found to be inversely associated with C-reactive protein (CRP), an acute phase protein<sup>(10)</sup>. Moreover, B-vitamin supplementation studies show benefits on inflammatory markers and immune responses, but the limited human studies that exist have been conducted in patients with gastrointestinal disease<sup>(11)</sup>. In a colitis-mouse model, riboflavin supplementation reduced gut inflammation via direct effects on the immune system or indirectly through altering the gut microbiota composition<sup>(7)</sup>. To date, only one study has examined the role of B-vitamins in modulating the gut microbiome and inflammation in relation to dementia. This study in rats with Alzheimer's type dementia found that deficiencies of folate and/or vitamin B12 in rats were associated with disturbed gut microbiota composition and

impaired memory function<sup>(12)</sup>.

Optimising B-vitamin status may thus support better cognitive health, potentially via altering the gut microbiome and reducing inflammation. However, current evidence from human studies is inconsistent and limited. Further studies, especially in the form of randomised controlled trials, are required to determine the roles and bidirectional relationships of B-vitamin status, the gut microbiome and immune function in the ageing brain.

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## BIOGRAPHY

Umair Shabbir is currently pursuing a PhD at the Nutrition Innovation Centre for Food and Health (NICHE), Ulster University, Northern Ireland. His research focuses on B-vitamins, immune function, and the gut microbiome, with particular emphasis on their impact on brain health in ageing populations.

Umair holds an M.Sc. (Hons) in Food Technology from the University of Agriculture, Faisalabad, Pakistan, where he explored cost-effective methods for developing goat milk cheese. He also earned a BS (Hons) in Food Science and Nutrition from Government College University, Faisalabad. Umair worked as a Research Assistant at Kangwon National University, South Korea, where he investigated the application of various bioconversion technologies to develop functional food materials aimed at combating Alzheimer's disease.

Umair has contributed to the field of nutrition science, publishing in journals such as *Food Chemistry*, *Frontiers in Nutrition*, and *PLOS ONE*. His work on B-vitamin biomarkers and immune function has been presented at major conferences, including the 14th European Nutrition Conference (FENS 2023) in Serbia and the Nutrition Society Congress in Belfast (2024).

As an active member of the Nutrition Society since 2022, Umair is committed to advancing research that bridges the gap between micronutrients, gut health, and cognitive function.

## **The role of digital nutrition interventions for individuals with severe mental illness: insights, challenges and future directions**

*Ciara O'Sullivan, Munster Technological University, Ireland*

### **PRESENTATION SUMMARY**

Globally, approximately one in every three individuals will experience a disruption to their mental health at some stage in their lives (Vigo, Thornicroft and Atun, 2016). Individuals with severe mental illness (SMI) are more likely to engage in adverse health behaviours (Carney, Bradshaw and Yung, 2016; Teasdale et al., 2019) and often face a substantially decreased life expectancy (Chan et al., 2023). Nutrition is a key modifiable risk factor for individuals with SMI (Marx et al., 2017; Cherak et al., 2020) and nutritional interventions can play a crucial role in the treatment of SMI (Burrows et al., 2022). Despite their benefits, clinicians often cite challenges and barriers when implementing lifestyle interventions in individuals with SMI (Deenik et al., 2019; Aucoin et al., 2020).

Digital technology presents a promising avenue to be a supportive tool for behaviour change in individuals with SMI, including managing health behaviours, improving treatment access, costs, decision making and wellbeing (Sawyer et al., 2023). It also holds the potential to improve service efficiency, costs, and treatment access, (Bucci, Schwannauer and Berry, 2019). At a broader level, digital tools can aid in care coordination, clinical training and monitoring health indices (Naslund and Aschbrenner, 2019). Despite these advantages, its application to nutrition-related outcomes remains limited, with the majority of studies so far focusing on smoking or physical activity (Sawyer et al., 2023).

This narrative review will explore the role of digital nutrition interventions for individuals with SMI, highlighting key insights, challenges and future directions. It will examine how behaviour change models such as the Behaviour Change Wheel (BCW) and COM-B model (Michie, Van Stralen and West, 2011), can guide intervention design to support behaviour change. Additionally, it will highlight the importance of co-design methodologies, emphasising the need for user-centred approaches in this population.

Findings from the authors PhD research provide further insights into this gap. A behaviour analysis of nutrition and technology use among individuals with SMI in mental health hostels (under review) identified barriers to healthy eating (e.g. limited autonomy in cooking and food choice) and barriers in digital technology use (e.g., digital literacy, and lack of access). A co-design protocol (under review) further highlights the importance of user-centred intervention development in this population.

While digital nutrition interventions hold promise as an avenue for supporting dietary change, significant challenges remain. To maximise their impact, interventions must be co-designed with service users, addressing barriers and tailoring to meet the unique needs of this population. To address these gaps, more research is needed to explore how digital nutrition interventions can be effectively designed and implemented in this population.

The review will outline key recommendations:

- Expand research on digital nutrition interventions, beyond weight management and incorporate digital literacy training.
- Embed co-design principles to enhance user engagement and ensure interventions are specific to the needs of this population
- Utilise behaviour change models (e.g., BCW, COM-B Model) to optimise intervention design.

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## BIOGRAPHY

Ciara O'Sullivan is an Assistant Lecturer and PhD Candidate at Munster Technological University. She holds a BSc (Hons) in Health and Leisure with Health and Wellbeing from Munster Technological University and MSc in Mental Skills and Mental Health in Sports and Exercise from University of Limerick. She currently lectures on health promotion and health and well-being modules. Before embarking on her PhD, she worked as a researcher on several projects, including research on human rights in Irish mental health services and caregiver support interventions. Her PhD (2023-2027), funded by AdvanceCRT of Taighde Éireann – Research Ireland, focuses on the design and evaluation of a digital nutrition intervention for individuals with severe mental illness. This research integrates behaviour change models and co-design methodologies to develop user-centered solutions. Her PhD follows a multi-phase approach:

- **Study 1 - Behaviour analysis:** Identifying facilitators and barriers to nutrition behaviours and technology use in high-support mental health hostels in Ireland.
- **Study 2 - Co Design:** Collaborating with service users and stakeholders to develop a digital nutrition intervention based on the behaviour analysis findings.

- **Study 3 - Pilot Study:** Assessing the feasibility and effectiveness of the intervention before wider implementation.

Ciara is currently in the co-design phase, developing the digital nutrition intervention and conducting public and patient involvement (PPI) sessions. Ciara hopes her research will contribute to the development of evidence-based digital nutrition interventions that can be integrated into mental health services, ultimately improving the wellbeing of individuals with severe mental illness.



## **Nutrition in cancer survivorship – bridging the evidence-practice gap**

*Dr Laura Keaver, Atlantic Technological University, Ireland*

### **PRESENTATION SUMMARY**

With advances in detection and treatment, the number of individuals living with and beyond cancer continues to grow. As survival rates improve, so too does the need to address the long-term health and quality of life of cancer survivors. Nutrition plays a central role throughout the cancer continuum—from diagnosis and treatment to recovery and survivorship. However, access to evidence-based nutrition care remains limited for many.

Cancer cachexia, often occurring during active treatment, can lead to significant changes in body composition, reduced treatment tolerance, and poorer outcomes. Moreover, treatment-related side effects such as nausea, taste changes, or gastrointestinal symptoms can further impair nutritional intake, increasing the risk of malnutrition. Indeed, individuals with cancer are among the most malnourished of all patient groups.

Post-treatment, cancer survivors often face a new set of challenges. Nutritional needs during survivorship shift toward weight management, addressing persistent symptoms, and reducing the risk of chronic conditions such as cardiovascular disease, as well as preventing cancer recurrence. Despite these distinct needs, cancer survivors are still largely advised to follow general cancer prevention guidelines, such as those from the World Cancer Research Fund. In Ireland, fewer than one in ten cancer survivors report having access to a dietitian.

Given current resource limitations, relying solely on dietetic consultation is not feasible. It is therefore essential that other healthcare professionals (HCPs) can identify nutrition-related concerns and offer basic, evidence-informed advice. However, barriers such as limited time, funding, defined roles, and nutrition knowledge often prevent HCPs from integrating nutrition into standard oncology care. As a result, many survivors seek information online—where the quality and accuracy of nutrition advice can be highly variable, unregulated, and in some cases, harmful.

Cancer support centres represent a valuable but underutilised opportunity for delivering nutrition support, yet they too often face challenges related to funding and limited dietetic involvement. New approaches, including self-management programmes and the integration of “Food is Medicine” strategies, may help to bridge the current evidence-practice gap. These approaches aim to empower individuals with practical, tailored nutrition guidance in an accessible and scalable way.

From a policy standpoint, while there is growing recognition of the importance of supportive care in oncology, including nutrition, progress has been inconsistent. National strategies often lack clear implementation plans and sustainable funding models. Greater coordination between clinical services, support organisations, and policy stakeholders is needed to embed nutrition as a core component of cancer care.

This presentation will explore current evidence on the role of nutrition in cancer survivorship, review challenges in delivering care, and highlight promising opportunities and emerging models for more integrated, accessible, and person-centred nutrition support across the cancer care pathway.

## **BIOGRAPHY**

Laura Keaver is a registered dietitian and public health nutritionist, and has been a lecturer in Human Nutrition and Dietetics at ATU Sligo since 2016. She is Programme Chair for the BSc in Human Nutrition and teaches across clinical nutrition, public health nutrition, and global nutrition modules.

Her research focuses on the role of nutrition in the prevention, treatment and management of chronic diseases, student health, and nutrition education. Laura has a particular interest in cancer survivorship and is actively involved in national and international collaborative projects in this area.

She was named Irish Research Dietitian of the Year by the Irish Nutrition and Dietetic Institute (INDI) in 2021 for her contributions to cancer and nutrition research. She received the Professor Éilis McCaughan Cancer Care Research Memorial Award in 2024 and was awarded Fellowship of the National Institute of Preventive Cardiology, recognising her work in cardiovascular disease prevention. Laura serves on the Research and Scientific Steering Group of the INDI, the Cancer Nutrition Network, the European Specialist Dietetic Network Oncology Committee of the European Federation for the Association of Dietitians, the National Institute for Health Research Cancer Survivorship Working Group in the UK, and the Cancer Management Group of the International Society of Behavioural Nutrition and Physical Activity.

Outside of her academic and research work, Laura is a passionate about sport—both watching and playing and loves travelling and exploring new cuisines and cultures.

## **Are we missing opportunities to promote healthy and sustainable meals?**

*Professor Jeff Brunstrom, University of Bristol, UK*

### **PRESENTATION SUMMARY**

Population-level approaches to behaviour change often focus on education, nudging, or legislation. However, punitive approaches are often unpopular, while education or nudging can be less effective. In our Transforming UK Food Systems project (Sustainable Nutrition, Environment, and Agriculture, without consumer Knowledge; SNEAK), we have developed an alternative approach to multi-day choice-architecture manipulation.

Currently, 42% of UK workers eat at a canteen, 7 million school meals are served daily, and more than a quarter of adults consume a meal in an out-of-home food outlet (e.g., café, restaurant, or takeaway) every week. In a canteen setting, menu options tend to rotate on a fixed-term basis (e.g., menu options A, B, and C are available on Monday, options D, E, and F on Tuesday, and so on). Because consumers can only eat one meal per day, the impact of a weekly menu on health and sustainability will depend on competition between dishes offered each day. Accordingly, we reasoned that the weekly impact of a menu can be improved by strategically swapping dishes across days.

Recently, we tested this idea in a catered university hall of residence. We optimised two different weekly menus (3 dishes x 5 dinners) to reduce carbon footprint and intake of saturated fatty acid, and food choice was monitored over two weeks (~5,000 meals in ~300 students). Each weekly menu has 1.4 million alternative configurations, each with different competition structures between dishes. With little impact on menu acceptability, our 'optimised menus' generated a 30.7% reduction in carbon footprint and a 6.3% reduction in saturated fatty acid intake. Building on this, we next explored the potential for further real-world application by analysing menu data from 11 National Health Services hospitals. By combining these data with responses from a nationwide food-choice task (participants  $N=550$ ), we estimated the reductions in carbon footprint and saturated fatty acid intake that would be observed if our approach was applied nationally. Targeting a single variable resulted in a predicted 19.5% reduction in carbon footprint and a 15.7% reduction in saturated fatty acid intake, and simultaneously optimising across both variables achieved a 17.7% and 12.9% reduction, respectively.

SNEAK was originally conceived to promote sustainability and health by shuffling dishes across a weekly menu. However, we have also applied our modelling at an ingredient level to develop an innovative individual dish-level intervention. Current approaches to improving meals' nutritional quality and sustainability tend to focus on substitution - unsustainable and unhealthy ingredients are often replaced with

more sustainable and healthy alternatives. With pizza, for example, cheese can be replaced with a lower-fat, non-dairy alternative. However, because consumers will likely reject radical recipe changes, opportunities to reduce fat and carbon footprint are limited.

Using the same ‘swap’ model, we generated a pool of ingredients and hosted a cooking competition at the University of Bristol. Chefs presented their dishes to a panel and were judged to be at least preferable to several established favourites. Importantly, because our modelling pre-selected ingredients that are guaranteed to be healthy and sustainable, this demonstrates a way to ‘reboot’ our cuisine, no longer constrained by the limits of reformulation and comparisons with established favourites.

Together, our work has exposed hidden opportunities to benefit health and the environment merely by strategically swapping daily meals and ingredients. Building on this success, we see the immediate potential to realise the same benefits in various contexts, including schools, hospitals, care homes, and food outlets (e.g., cafés and takeaways). Adopted widely, this could be important in meeting population-level targets for dietary intakes and agri-food sustainability.

## **BIOGRAPHY**

Jeff Brunstrom was awarded his Ph.D. from the University of Birmingham (UK). In 1999, he became a lecturer in the Department of Human Sciences at Loughborough University (UK), and in 2005, he moved to the University of Bristol (UK). His current position is Professor of Experimental Psychology. Jeff co-leads the Nutrition and Behaviour Unit in the School of Psychological Science. Major research themes include appetite, memory and cognition, expected satiety, dietary learning, eating behaviour, portion size, and food choice, and Jeff has published over 150 papers on these topics. His research has been supported by various funding agencies, including the BBSRC, MRC, ESRC, EU-FP7, and NIHR. Jeff serves several advisory roles, and he leads ‘Consumer Lab’, which fosters collaboration between industry and academic researchers and forms part of the BBSRC-OIRC network. He has been recognised by the Society for the Study of Ingestive Behavior as a recipient of both the Alan N. Epstein Research Award (2011) and the Hoebel Prize for Creativity (2023).

**Affiliation:** Nutrition and Behaviour Unit, School of Psychological Science, University of Bristol, UK.

## **Using mixed methods research to understand food environments in Sri Lanka and Tanzania**

*Professor Nicholas Nisbett, Institute of Development Studies, Food Equity Centre, UK*

### **PRESENTATION SUMMARY**

This presentation describes early results from mixed-methods research within the FRESH initiative (now part of 'Better Diets for Nutrition) on promoting fruit and vegetable environments within Sri Lanka and Tanzania. We report on our integrated approach to exploring food environments from multiple lived experiences and perspectives including a food vendor census and mapping, qualitative interviews and participatory photography with vendors and community members, and participatory workshops with policy/ NGO stakeholders to identify policy challenges and food environment intervention options to support greater fruit and vegetable consumption.

### **BIOGRAPHY**

Nicholas Nisbett is a Senior Research Fellow at IDS, a Professor of Global Public Policy, Nutrition and Health Equity at the University of Sussex and co-founder of the Food Equity Centre. A member of CFS High Level Panel of Experts 18 on Food System inequalities, he has carried out research and advisory roles for a range of international organisations, including WFP, UNICEF and the FAO, with research focusing on equity; political economy, community level drivers of nutrition and nutrition-sensitive social protection. Prior to IDS, Nisbett worked on food systems, agriculture, environment and trade policy for the UK Government.

## **Processing plant proteins for food: navigating the balance between nutrition and sustainability**

*Associate Professor Iben Lykke Petersen, University of Copenhagen, Denmark*

### **PRESENTATION SUMMARY**

The shift towards plant-based proteins is widely recognised as a key strategy in addressing climate change and promoting sustainable food systems. However, this transition presents a paradox: while minimal processing of plant proteins is more environmentally sustainable, it often results in lower nutritional quality due to poor digestibility and limited essential amino acid availability. On the other hand, processing can enhance nutritional quality by improving protein digestibility and removing antinutritional factors but comes at a higher environmental cost.

This talk will explore the intricate relationship between plant protein processing, sustainability, and nutrition. I will discuss how different processing methods affect protein nutritional quality, considering *in vitro* protein digestibility and antinutrients, as well as protein modifications and structural changes that can either enhance or degrade nutritional value. Additionally, I will examine the role of food classification systems, such as ultra-processed food (UPF) categorisations, in shaping public perceptions of plant-based products.

Ultimately, striking an optimal balance between sustainability and nutritional quality requires a nuanced approach that considers food processing levels, protein modifications, and their effects on human health. Emerging analytical tools like proteomics and metabolomics can provide deeper insights into these interactions, paving the way for plant-based foods that are both nutritionally adequate and environmentally responsible. With this talk, I hope to help you navigate the sustainability paradox of processing plant proteins for food.

### **BIOGRAPHY**

Dr. Iben Lykke Petersen is an Associate Professor at the Department of Food Science, University of Copenhagen in Denmark. She holds an MSc in Agronomy from The Royal Veterinary and Agricultural University, Denmark, and a PhD in Environmental Chemistry and Biochemistry from the University of Copenhagen. After her PhD, she worked as a scientist at Carlsberg Research Centre before returning to academia in 2013. Her research focuses on plant proteins for food, particularly on understanding how processing influences protein quality in terms of both nutrition and functionality. She investigates the impact of extraction, fractionation, and post-processing techniques—such as fermentation and wet cooking—on *in vitro* protein digestibility, amino acid composition, and antinutrient content. Dr. Petersen has a special interest in plant proteins from pulses such as

faba beans, peas, lupins, and lentils, as well as from pseudocereals and oilseeds. Her research places a strong emphasis on trypsin inhibitors, exploring their effects on protein quality from both nutritional and functional perspectives, with a growing focus also on their immune-regulating potential. Beyond plant protein quality, she is particularly interested in bridging her work with nutrition science, exploring the concept of "food as medicine". She investigates how plant-based foods and specific bioactive compounds contribute to health promotion and disease prevention, adding to the expanding body of evidence on the role of diet in maintaining and improving health.

## **Environmentally sustainable nutrition for older adults**

*Professor Peter Weijs, Amsterdam University of Applied Sciences, The Netherlands*

### **PRESENTATION SUMMARY**

Global warming is a danger to earth, society and health. We cannot deny it and we can do something about it. Although our diet does not at first appear relevant, the production of nutritional products is extremely relevant to our environment. With Eat Lancet a healthy and sustainable diet was proposed, with essentially more focus on plant-based food products compared to animal-based food products. We can also call it a protein transition as we can change from 60% animal-based protein to 60% plant-based protein. Older adults in society is a large group, at risk of both obesity and sarcopenia. Moreover, the combination of obesity and sarcopenia may result in sarcopenic obesity with an even worse prognosis for disease and survival. For obesity we like to advise less energy from nutrition and more physical activity. For sarcopenia we like to advise more strength training and more protein. More protein consumption however is also a burden to the environment. An alternative is to increase the plant-based protein component for this target group. But how easy is it to change the eating behaviour in the older population. Are they motivated to change on behalf of the environment? And when treated for obesity, the lower caloric intake provides a challenge to an increase of protein intake. When adding the protein transition, we do have quite a complex dietary challenge that we like to tackle in the 2EAT research project that is currently ongoing in Amsterdam, the Netherlands.

### **BIOGRAPHY**

Prof.Dr.ir. Peter J.M. Weijs is a professor of Nutrition and Exercise at both the Amsterdam University of Applied Sciences (Lector) as well as at the Amsterdam University Medical Center (Full professor). In 1994 he began as teacher in nutrition and is now more than 30 years at the Department of Nutrition and Dietetics and more than 15 years as a professor.

Healthy nutrition and adequate physical activity play an important role in healthy growing up and healthy ageing. Both in the prevention of disease as well as recovery of disease. The research group Nutrition and Exercise is concerned with optimisation and maintenance of a healthy lifestyle for very diverse vulnerable populations. We develop and test nutrition and exercise interventions for maintenance and recovery of health and daily physical functioning. Our expertise covers overweight and obesity, sarcopenia, sarcopenic obesity, measurement of body composition and energy expenditure, protein requirements, protein quality and protein transition.



Peter got his MSc in Human Nutrition at Wageningen University in 1986, already then working on energy balance and protein requirements. He worked at University of Texas Medical Branch in 1988 and became a European Commission Marie Curie Fellow at the Rowett Research Institute in Aberdeen in 1993-1994. In between he got his PhD at Wageningen University on metabolic studies on protein requirements. In 1994 he became a teacher at the Nutrition and Dietetics course, 10 years of which he was a final project coordinator. From 2004 to 2023 he worked at the Department of Nutrition and Dietetics of the Amsterdam University Medical Center. In 2006 he established the Amsterdam Nutritional Assessment Center and is still its director.

## **Collaborating with ‘blue food’ system stakeholders to achieve optimal nutritional health and wellbeing in less affluent communities**

*Associate Professor Clare Pettinger, University of Plymouth, UK*

### **PRESENTATION SUMMARY**

The imperative for food system transformation is well known and concerted UK action is essential to impact inter-related food system issues including health inequalities and diet-related disease (National Food Strategy, 2020). Key to this effort is enabling materially deprived (disadvantaged) communities (Health Foundation, 2024) better access to healthy, affordable, sustainable food (FoodSEqual, 2021).

To date, minimal research has investigated ‘blue foods’ (Nicolini et al 2024) i.e. foods sourced from oceans and rivers, including fish (Tigchelaar et al 2022), probably because they are ethically complex. On the one hand, fish is culturally important (Martino et al 2023), providing essential nutrients (Ruxton 2011) that protect from non-communicable diseases (Jamioł-Milc et al 2021). Most UK residents don’t eat the recommended amount of fish (two portions/week, one portion of oily fish). A clear health inequality is that vulnerable groups, such as those living in areas of deprivation, eat low-quality diets, have poor health outcomes, *and* are most likely not to eat enough fish. On the other hand, eating fish is an environmental ‘red flag’ because of global overfishing (FAO, 2020).

New collaborative and creative solutions are, therefore, needed to tackle such food system inequities. By working together, all voices can be equally heard when decisions are being made to improve the system. Similarly, by innovating and disrupting supply chains, will enable better access to healthy, affordable and tasty food that will support better nutrition, health and wellbeing.

This paper will present a critique of the ‘The Plymouth Fish Finger’ as a collaborative social innovation case study. Part of the FoodSEqual research project (FoodSEqual 2021), this exploratory pilot project championed ‘co-production’ approaches (Shaw et al 2024) to achieve multiple (potential) impacts including: i) ‘disruption’ of fish supply chains; ii) improving access to and affordability of fish for local communities; iii) education about fish species, health, sustainability, and fishing practices; iv) enhancing fishing community livelihoods; v) informing policy and ‘blue food system’ discourses.

The paper will critique the range of participatory methods used, which successfully forged relationships between multiple stakeholders including academics, communities, fishing industry stakeholders, schools, school meal providers and policy makers. Of methodological note is the engagement of FoodSEqual

Community Food Researchers (CFR) (see Pettinger et al 2023); workshops and consultations with diverse fish industry stakeholders (e.g. NGOs; CICs); support from and interviews with a local School meal provider; co-design with secondary school students; taste-testing and educational pop-up sessions with primary schools and communities; workshop with policy makers and advocates; processual observations and fieldnotes.

This critique will show how this social innovation case study has exemplified the complex interplay between factors driving distortions in access to and availability of fish within the local food system. Through collaborative multi-stakeholder (transdisciplinary) processes, using participatory creative methods, new strategies and recommendations for research, practice, action and policy are informed, all of which offer great potential for transformative systemic (blue) food system change.

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## BIOGRAPHY

Clare Pettinger is an award-winning Registered Dietitian, Public Health Nutritionist and experienced educator, who is actively engaged in community-focussed research around food systems, poverty and social justice. She is passionate about public engagement and radical collaborative and creative approaches to tackle local (and global) health, social and planetary (in) equity challenges.

Her current research is co-leading a 5-year consortium food systems project '*FoodSEqual: Co-production of healthy, sustainable food systems for disadvantaged communities*' (led by University of Reading, funded £6m by UKRI Strategic Priorities fund) which aims for more equity in access to and affordability of healthy and sustainable diets across socio-economic levels. The project uses creative methods to empower and engage communities, giving them a voice to share their food stories, addressing issues of power to enhance wellbeing and inform social justice discourses.

With a very keen interest in 'co-production' and 'social innovation' approaches to engage diverse stakeholders (e.g. citizens, schools, businesses) Clare has pioneered and led the nationally acclaimed 'Plymouth Fish Finger' pilot project. This innovative case study champions health, sustainability and social aspects of fish intake, exemplifying the complex interplay between factors driving distortions in and access and availability within the blue food system.

As educator, Clare is keen to embed sustainability/sustainable food systems within nutrition/dietetic curricula. To this end, she collaborates with nutrition professionals internationally. She currently sits on the British Dietetic Association's Sustainable Diets specialist group advisory board and previously sat on the Greener AHP sustainability curriculum design steering group. She can be found on LinkedIn and Instagram: @DrCPettingerRD BlueSky: drcpettingerrd.bsky.social

## **Effectiveness of a web-based dietary intervention program targeting young adults prior to parenthood: lessons learned from a randomised controlled trial**

*Professor Nina Cecillie Øverby, University of Agder, Norway*

### **PRESENTATION SUMMARY**

The importance of preconception health for lifelong physical and mental health in the next generation has gained increasing recognition. Preconception paternal and maternal risk factors like obesity and unhealthy diet affect the metabolic and cardiovascular health of their offspring later in life. These insights highlight the importance of diet and dietary behavior in the years before parenthood. There is currently a limited number of dietary interventions targeting the general preconception population, especially men.

In our project, PREPARED, we have evaluated the effect of a digital dietary intervention targeting young adults in a randomised controlled trial. Our primary aim was to improve participants' preconception diet, and our secondary aim was to improve preconception quality of life and maternal and child perinatal outcomes. There is a long follow up in this project, up to 20 years or when the participants become parents, with short questionnaires every year. Data will be linked to data from the Norwegian Medical Birth Registry.

We recruited 20–35 years without biological children in Norway in 2021. In total 1347 wanted to participate, of which 745 filled in a baseline 24-hour-recall and were randomised to either a control group or an intervention group which was given access to the digital intervention for 6 months. Dietary data were measured with 2x24 hours digital dietary recalls and a dietary screener at baseline, post intervention and 6 months after the intervention ended.

In this presentation we will present results from how we developed this dietary digital intervention in dialogue with young adults, the effect-results regarding our primary aim and how young people experience using this digital intervention. We will discuss lessons learned regarding recruitment, who we reach, experience with different dietary assessment methods.

**Development:** The intervention was designed to target both men and women, with a special focus on reaching men due to the less communicated relevance of male preconception diet for the health of prospective children. Data from interviews with the preconception population before the intervention was developed identified that few knew of the importance of this phase for their future children. They also provided input to what would motivate them to improve dietary behavior.

**Results:** We will present currently unpublished results regarding the effect of the intervention on dietary measures, and how participants experienced the digital

dietary intervention.

Lessons learned: It was difficult to recruit participants for this type of study in this population and to keep the participants in the trial. It was also difficult to recruit participants from lower socio-economic groups, which we aimed for. We will discuss this as well as the general use of digital interventions and individual approaches as ways of improving public health.

## **BIOGRAPHY**

I am a professor of Public Health Nutrition and Nutritional Epidemiology at the University of Agder, Norway. My research focuses on how diet in early phases of life ranging from preconception, through pregnancy, childhood and adolescence affects health and developmental outcomes. The last 12 years I have led several projects where we have developed, evaluated and implemented digital interventions to improve dietary behaviors over the life course. The PREPARED project is an example of such. I am the scientific leader of the UiA Priority Research Centre (PRC) on Lifecourse Nutrition including more than 30 researchers with interdisciplinary and complementary competences, all joining forces to work within the field of healthy and sustainable diets, nutrition and lifecourse approaches.

## **Developing an infant and young child feeding in emergencies preparedness plan for the island of Ireland: a consensus study**

*Dr Aileen Kennedy, Technological University Dublin, Ireland*

### **PRESENTATION SUMMARY**

Infant and young child feeding in emergencies (IYCF-E) is essential for protecting child health and survival during crises in which access to clean water, adequate nutrition, and healthcare can be compromised. In such contexts, adhering to recommended feeding practices becomes increasingly difficult, placing infants and young children at elevated risk of illness and mortality. Despite the World Health Organization's 2018 call for all member states to develop IYCF-E preparedness plans, many high-income countries, including Ireland, lack comprehensive IYCF-E frameworks. The absence of a coordinated, cross-jurisdictional approach to IYCF-E on the island of Ireland leaves this population particularly vulnerable during emergencies such as pandemics or climate-related disruptions.

This study sought to identify key risks, gaps, and priorities for IYCF-E planning across Northern Ireland and the Republic of Ireland, using a consensus-based approach to support the development of the first all-island IYCF-E preparedness plan. A mixed-methods design was employed, incorporating a cross-sector stakeholder survey (n = 125), targeting professionals in healthcare, emergency response, policy, and nutrition. This was followed by a facilitated scenario-based workshop with 20 stakeholders from public health, health care, emergency planning, statutory agencies, and voluntary organisations.

The survey assessed levels of awareness, perceived risks, current service provision, and which government departments hold responsibility for IYCF-E planning. The workshop used five hypothetical emergency scenarios—such as community displacement, an influx of refugees, widespread power and water outages, commercial milk formula (CMF) supply chain disruption, and increased living costs—to facilitate structured group discussions guided by the emergency cycle: preparedness, response, and recovery. Data were analysed thematically using a framework approach and revealed several recurring vulnerabilities across both study components.

Participants in both studies identified a lack of formal leadership, governance, and cross-sectoral coordination for IYCF-E. Only a minority were aware of existing international guidelines, and none reported active implementation of IYCF-E protocols within their respective work environments. Key risks anticipated in an emergency included unsafe CMF feeding due to limited access to clean water and sterilisation equipment, conflicting caregiver messaging, and inadequate professional training. Stakeholders also raised concerns regarding the over-reliance

on CMF, aggressive marketing of CMF and complementary foods, and the fragility of the donor human milk (DHM) supply, which currently depends on a single milk bank serving the entire island.

There was strong consensus on the need for an all-island IYCF-E policy, supported by investment in DHM infrastructure, professional training, regulated CMF distribution, and the integration of IYCF-E into national emergency and public health planning. Participants emphasised the importance of cross-border collaboration and harmonisation of standards, reflecting the interconnected nature of health and emergency systems across Ireland. Improved public and professional communication strategies during crises were also highlighted as a key priority. In conclusion, this study identifies urgent gaps in IYCF-E preparedness on the island of Ireland and provides a foundation for evidence-informed policy and systems change. As public health threats, climate shocks, and geopolitical instability increase, structured IYCF-E planning must become a priority to protect the nutritional well-being of infants and young children across both jurisdictions.

## **BIOGRAPHY**

Dr Aileen Kennedy is a CORU-registered Dietitian and Lecturer in Dietetics at the School of Biological, Health and Sport Sciences, Technological University Dublin. She holds a BA (Mod) in Natural Science from Trinity College Dublin, an MSc in Public Health Nutrition from the University of Glasgow, and a Postgraduate Diploma in Dietetics. Her PhD, completed at Dublin City University, examined the influence of early infant feeding practices on the development of sour taste preferences during infancy.

Dr Kennedy has worked extensively in public health nutrition and dietetics, contributing to several EU-funded research projects including DEXLIFE, InterConnect, and DEDIPAC. Her primary research interests lie in infant feeding, with a particular focus on early feeding practices, food preference development, and nutrition in emergency contexts.

Her current research focuses on developing an all-island Infant and Young Child Feeding in Emergencies (IYCF-E) preparedness plan, which was funded the North-South Research Programme (NSRP), delivered by the Higher Education Authority (HEA). The project reflects a strong commitment to advancing cross-border collaboration in research and policy development for IYCF-E across the island of Ireland.



The Nutrition Society, like many other scientific societies around the world, welcomes support of the work it does. The support the Society raises helps to subsidise fees for delegates to attend the Society events, which directly benefits the Society's members.

However, it is important to note that supporters do not have a say in the topics covered at Society events, the people invited as speakers (except in the case of Satellite Symposia), or the way they are run.

The Society is absolutely committed to maintaining its reputation as an independent learned society. As a result, support is kept separate from science. The Society makes this point clearly on its website in the sponsorship policy at [www.nutrition society.org/sponsorship- policy](http://www.nutrition society.org/sponsorship-policy) and very clearly to the Society's supporters.

Additionally, support helps the Society to:

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- Hire suitable venues and arrange social functions that allow members to network.
- Support student bursaries allowing the next generation of nutritionists to attend and present abstracts at conferences.
- Support travel grants allowing members to attend events.

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The Nutrition Society would like to thank the following organisations for their generous support:

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## **NutriPD: Growing Professional Competence in Nutrition**

"NutriPD (Nutrition Professional Development) is a National Forum funded project at ATU Galway. The project aims to grow professional competence in nutrition in Ireland, through the implementation of competency-based education in higher education institutions and the creation of a network of nutritionists to highlight issues facing the profession and advocate for the protection of the title. Our NutriPD Community of Practice (CoP) was established in May 2020 and now has over 170 members. The CoP brings together those with a key stake in nutrition education and employment to develop a network for sharing information and advocating for recognition of the registration process and Association for Nutrition (AfN) accreditation. We have members from all backgrounds in the nutrition field, including academic, research, industry, community nutrition, regulation, freelance, and more. Meetings take place during the academic calendar from September to June and participation in the network can count towards CPD hours for professional development.

Our work primarily focuses on supporting the nutrition community through the creation of professional development opportunities and connecting nutrition professionals across Ireland. We are always open to new members!

Alongside our national project NutriPD, we have been successful in securing European funding exploring various research topics including food entrepreneurship, sustainability and digitalisation teaching practices and graduate skills, and development of nutrition education for healthcare professionals.

For more information, please check out our webpage [www.NutriPD.eu](http://www.NutriPD.eu) or contact Sarah at [sarah.odonovan@atu.ie](mailto:sarah.odonovan@atu.ie) or Lisa at [lisa.ryan@atu.ie](mailto:lisa.ryan@atu.ie)"

## **TU Dublin Research and Innovation**

TU Dublin hosts a thriving research community engaged in designing innovative technological solutions, generating scientific insights, influencing policy makers, and reflecting on and contributing to the creative life of Ireland and abroad. This is aligned with our vision of solving the world's most pressing problems and championing these issues at local, national, and global level. We actively support research and innovation activity from across the broad spectrum of disciplines pursued across all five TU Dublin faculties. We identify in our R and I strategy a set of five research priorities, aligned to selected SDGs, where we believe that coalescing our efforts in a transdisciplinary manner will focus and amplify the excellence and impact of our work. TU Dublin has a large community of research and innovators working individually and in collaboration on a wide of range of challenging and pressing topics. The set of research priorities set out below have been formulated to focus on areas where we have the greatest capability and reputation for delivering at scale and to enable greater impact by being framed through a transdisciplinary lens to amplify our excellence and impact:

- Culture, Innovation, and Inclusivity in a Changing Society
- Health and Wellbeing for a Thriving Society
- Materials and Technologies for Sustainable Transformation
- Sustainable Food Systems and Environmental Protection
- Transformative Digital Solutions

TU Dublin seeks to “Create a Better World Together” and make lasting contributions to technological, economic, social, and cultural progress and create a positive impact for all. Bearing that in mind, the Sustainable Development Goals were our blueprint for the development of our first Research and Innovation Strategy and establishment our priority areas for the next five years.

[www.tudublin.ie/research-innovation](http://www.tudublin.ie/research-innovation)

## **School of Biological, Health and Sports Sciences, TU Dublin**

The School of Biological, Health and Sports Sciences is located on City Campus, Grangegorman and our Tallaght Campus. The School was formed on 1st September 2022, bringing together the disciplines of Biological Sciences, Medical Sciences, Dietetics and Nutrition, and Sports Sciences, as part of the new TU Dublin organisation redesign.

The School is a centre for practice-led, research-informed education, fostering the development of practitioners, skilled scientists and researchers who contribute to the practice and advancement of health, sport and biological sciences. The Schools delivers flagship CORU approved programmes in Human Nutrition and Dietetics and Medical Science, and maintains a strong educational provision in Sports Science, Biosciences, Molecular Diagnostics and Public Health Nutrition. Our research is cross-disciplinary in nature, at the interface between biosciences, dietetics, medical sciences, nutrition and sports science, with an applied focus to improving human health.

Our expertise is nationally and internationally relevant and recognised and spans the range of higher education from fundamental to advanced biological sciences, specialist pre-clinical and clinical teaching and training. Our programmes are aligned with sectoral needs, ensuring the 'fit' of our graduates with the needs of the marketplace.

The School has unique flagship offerings at undergraduate level, specialist postgraduate taught programmes and advanced practice CPD for healthcare professionals. Located on our new Health and Education campus at Grangegorman and the new Sports Science and Health facility on the Tallaght campus, our state-of-the-art teaching and laboratory facilities have been designed to enhance and support the student experience.

The School is committed to supporting the development of work-ready graduates for the Health and Sports Sectors, Life Science and Diagnostic Industries that are career-focused and practice-led with the knowledge, competence, technical skills and professional qualities to contribute as practitioners, skilled scientists and leaders in the advancement of Ireland's Healthcare and Diagnostic Industry sectors.

## The TU Dublin Enterprise Academy

The Enterprise Academy is a multidisciplinary business unit at Technological University Dublin taking an innovative approach to collaborative talent development for workplace learners. The Enterprise Academy works with enterprises across all sectors and business types to create flexible, scalable, accredited solutions that address sector-specific, cross-sector and transversal skill needs.

We are a single-entry point for enterprise to partner with TU Dublin on their talent development initiatives and long-term skills strategy. We support collaboration between enterprise and TU Dublin's 24 schools and five faculties to co-create educational talent development solutions.

Collaboration between universities and enterprises is more crucial than ever. Such partnerships ensure that educational programmes remain relevant, agile, authentically assessed and aligned with the real-world demands of the workforce. Stakeholder engagement ensures that academic programmes are aligned with the current and future skills needs of the associated sectors, to serve as a pipeline to upskill/reskill interested professionals.

Our dedicated team of Senior Engagement Managers, who are domain experts and academics, are actively working with enterprise partners to understand their skills and talent development needs. We're co-creating accredited programmes and pathways that go beyond traditional, full-time degree offerings. Our flexible talent development solutions address sector-specific, cross-sector and transversal skills needs, as well as key drivers of change such as sustainability and digital transformation. These outputs can take many forms including short, sharp, bursts of learning such as:

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- Customised pathways to major and minor awards (PgCert, PgDip etc.)
- Senior leadership programmes
- Talent and role development
- Linked or Collaborative Provider opportunities, which allow enterprises to design and run their own training programmes, validated and accredited by TU Dublin.

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The Sustainability and Health Research Hub at TU Dublin is Ireland's dedicated translational research platform addressing critical environmental & public health challenges. Through an interdisciplinary, cross-sectoral approach, we bring together users, patients, researchers, health professionals, policy makers & industry to deliver practical, evidence-based solutions. SHRH bridges academic research with real-world application, combining expertise in health & nutrition, molecular biology, environmental monitoring, and biomedical engineering to support sustainable development, climate adaptation, and public health resilience.



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The Faculty of Sciences and Health comprises of four Schools; School of Food Science and Environmental Health, School of Biological, Health and Sport Sciences, School of Physics, Clinical and Optometric Sciences and, School of Chemical and Biopharmaceutical Sciences. The Faculty offers programmes from Higher Certificate to Honours Degrees and taught Masters programmes. Many of the degrees offered in the faculty are unique offerings in Irish Higher Education. The Faculty has a very vibrant research community with over 220, MPhil and PhD research students.

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