

Welcome to the latest edition of HNRC News

News

HNRC 25th Anniversary Conference “Global nutrition challenges in the next 25 years”

The HNRC celebrated its 25th anniversary with a conference held in the Urban Sciences Building on Wednesday 23rd October. We were particularly delighted to welcome back **Prof Andrew Rugg-Gunn** who was co-Director of the HNRC in our early years.

Our external speakers included **Prof Francesco Branca** (World Health Organisation) who gave an excellent talk on “Global Nutrition Challenges and Responses” and **Prof Sir George Alberti** (Imperial College London), who spoke of the history of the HNRC.

Two of our alumni also gave talks including **Dr Denise Robertson** (University of Surrey) on “Dietary starch; the good, the bad and the resistant” and **Prof Amelia Lake** (University of Teesside) on “Exploring Foodscapes”.

Speakers from the HNRC included Prof Georg Lietz, Prof Emma Stevenson, Dr Suzanne Spence, Prof Ashley Adamson, Prof Roy Taylor and Prof John Mathers.

We held a 3 Minute Thesis (3MT) competition for all Masters and PhD students based in the Human Nutrition Research Centre, and the winners were:

- 1st Prize: Sarah Corsi
- 2nd Prize: Grace Gardner
- 3rd Prize: Dave Ray



(L-R) Andrew Rugg-Gunn, George Alberti, Ashley Adamson and John Mathers

NUCoRE in Healthier Lives

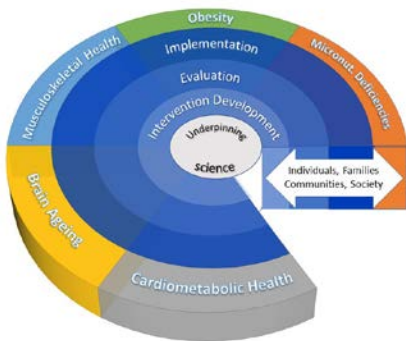
Members of the HNRC have worked together with colleagues in all three Faculties of the University to develop a proposal for a Newcastle University Centre of Research Excellence (NUCoRE) entitled “Healthier Lives”.

The new ‘Centre for Healthier Lives’ was launched on 1st November 2019. Our official webpage is:

<https://www.ncl.ac.uk/research/healthier-lives/>

Our NUCoRE Steering Group has members from all 3 Faculties as follows:

- Prof Ashley Adamson, Population Health Sciences, FMS
- Prof Susan Chilton, Newcastle University Business School, HASS
- Prof Eileen Kaner, Population Health Sciences, FMS
- Prof David Kirk, School of Computing, SAGE
- Prof Georg Lietz, Population Health Sciences, FMS
- Prof John Mathers, Population Health Sciences, FMS (Director)
- Dr Jytte Nielsen, Newcastle University Business School, HASS
- Prof Emma Stevenson, Population Health Sciences, FMS
- Prof Tim Townshend, Architecture, Planning & Landscape, HASS
- Prof John Wildman, Newcastle University Business School, HASS



The Mission of our NUCoRE is to improve public health through understanding, developing, implementing and evaluating more interventions to change lifestyle related behaviour and the wider environment. We aim to do this by providing a step change in research on interventions in the area of lifestyle and health.

Save the date!

We will be holding a launch for the NUCoRE in “Healthier Lives” on **Monday 6th April 2020** in the Boiler House. Details will follow in due course.

 Newcastle
University

Centre for
Healthier Lives

ISENC 2019

Newcastle University hosted the International Sport and Exercise Nutrition conference from 17th - 19th December at the Frederick Douglass Centre. Further information can be found here - <https://www.isenc.org/index.php> .

Fruit & Veg stall at RVI



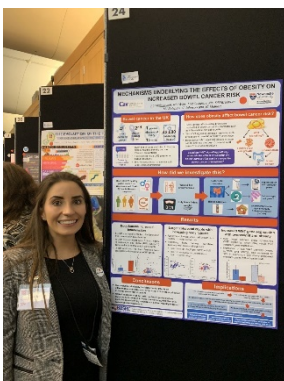
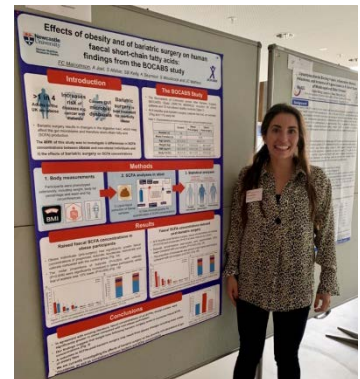
NHS staff have succeeded in getting a fresh fruit and vegetables stall to open outside the Royal Victoria Infirmery (RVI) new Victoria Wing main entrance in Newcastle. The stall will be open from 8am – 5pm.

A flyer advertising the stall can be found [here](#).

HNRC Successes

2nd Prize for poster competition at NuGOweek 2019, Bern

Congratulations to **Dr Fiona Malcomson** who won the 2nd prize for her poster titled “Effects of obesity and of bariatric surgery on human faecal short-chain fatty acids: findings from the BOCABS Study” which she presented at NuGOweek 2018.



Fiona was also selected to display her poster “Mechanisms underlying the effects of Obesity on increased bowel cancer risk” at the STEM for BRITAIN 2019 at the House of Commons on Wednesday 13th March in the Biological and Biomedical Sciences Session.

Congratulations to **Prof Ashley Adamson** who delivered an Insights Public Lecture in March 2019 titled '*Childhood obesity; they should do something about that*'. A recording of the lecture can be heard at <https://www.ncl.ac.uk/events/public-lectures/archive/item/2019childhoodobesitytheyshoulddosomethingaboutthat.html>

Congratulations to **Alison Barnes**, SRA/Dietitian, who has been appointed to Lecturer and will join Susan Lennie in delivery of the new Dietetics undergraduate degree in Newcastle.



Student Achievements

Congratulations to **Louis Goffe** who graduated on 10th July 2019. Louis was supervised by Prof Ashley Adamson, Prof Steve Rushton and Prof Martin White (Cambridge University). The title of his Thesis was "*Can independent takeaways change to offer healthier food? An exploration of the challenges for independent takeaways and public health*".

Congratulations to **Grace Gardner** (PhD student) who presented a poster at:-

- The International Association for Dental Research conference in Vancouver, on 20th June 2019. Presentation title: '*Impact of Change4Life Campaign on Child Sugars Intake: Qualitative Findings*'.
- The Public Health England Annual Conference at the University of Warwick, in September 2019. Presentation title: '*Impact of National Change4Life Campaign on Child Sugars Intake: Qualitative Findings*'.

Congratulations to **Nik Nur Azwanida Zakaria** who graduated on 3rd December 2019. Nik was supervised by Dr Ed Okello and Prof Mark Birch-Machin. The title of her Thesis was "*Evaluation of anti-ageing properties of Moringa oliefera Lam., Centella asiatica (L.) Urban, Clitoria ternatea L. and Cosmos caudatus Kunth for potential application as cosmeceuticals*".

Invited lectures at Events/Conferences

Prof Ashley Adamson attended the ISBANPA, Prague, Czech Republic on 4th – 7th June 2019. An oral presentation was given by **Louis Goffe** and a poster was presented by **Cassey Muir**. Further

information can be found at

https://www.isbnpa.org/files/annual_meetings/2019/07/11/22/attachments/5d277dbf5f214.pdf

In September, Prof Adamson gave the Plenary session: *Translational Research in Childhood Obesity* at the UKCO 2019 in Leeds on 12th – 13th September 2019. Posters were also presented by Dr Suzanne Spence and Dr Lorraine McSweeney. Further details available at <https://www.aso.org.uk/events/ukco/>

On 5th November 2019, **Prof John Mathers** gave evidence at the House of Lords Inquiry into "Ageing: markers, prediction and diagnosis". A recording of the session is available to view here: <https://parliamentlive.tv/Event/Index/4903fe3f-7449-4674-822b-f67828a4f1f9>

On 27th November, Prof Mathers gave an invited lecture entitled "*Nutrition Challenges in the next 30 years*" at the 30th Anniversary Symposium of the Dairy Council for Northern Ireland at the University of Ulster.

Prof Mathers was also gave plenary lectures at the ILSI CSIRO Human Variability Conference in Sydney on 14th & 15th May, and at the ILSI SEAR Science Symposium on 'Human Variability & Personalized Nutrition - Opportunities for Research, Public Health Benefits and Food Innovation' in Singapore on 17th May.



Prof Mathers and colleagues at the Dairy Council Anniversary Symposium

Prof Mathers also gave a Named Lecture at the Diabetes UK Professional Conference 2019 in Liverpool on 6th & 7th March. The Named Lecture was titled: Rank Nutrition Lecture in honour of Harry Keen: "*Personalised nutrition: A route to better public health*".

Dr Suzanne Spence presented a poster at the Academy of Medical Sciences Winter meeting on 31 October 2019

Dr Spence will be attending the 15th UKSBM Annual Scientific Meeting on 16-17 Jan 2020, where the GENIUS Network symposium proposal submission has been accepted.

Studies/Awards Update

NIHR PHR 'An evaluation of the implementation of national school food standards in secondary schools and their impact on the school food environment and pupil intake of free sugars: a

mixed methods study' (led by University of Birmingham), 1/3/19 to 31/5/2021 £745,297 [Co-investigators **Ashley Adamson** and **Suzanne Spence**].

NIHR: 'Can embedding the MapMe intervention, a tool to improve parental acknowledgement and understanding of childhood overweight and obesity, in the National Child Measurement Programme lead to improved child weight outcomes at one year?', 1/3/20 – 28/2/23, £1.5m [PI **Ashley Adamson**]

Drs Fiona Malcomson, Oliver Shannon and David Houghton have been awarded two BBSRC-UKRI Diet & Health Seeding Awards to investigate the effects of a white kidney bean extract as an inhibitor of alpha amylase and on markers of gut health.

Staff News

Welcome to **Samantha Redgate**, Research Associate, who is working on the Health Foundation project.

Goodbye to **Dr Wendy Wrieden**, Principal Research Associate, who retired at the end September 2019.



Publications

Recent HNRC publications

- **McSweeney, L.; Bradley, J.; Adamson, A.J.; Spence, S.** [The 'Voice' of Key Stakeholders in a School Food and Drink Intervention in Two Secondary Schools in NE England: Findings from a Feasibility Study.](#) *Nutrients* 2019, 11, 2746.
- **Foster, E., C. Lee, F. Imamura, S. E. Hollidge, K. L. Westgate, M. C. Venables, I. Poliakov, M. K. Rowland, T. Osadchiy, J. C. Bradley, E. L. Simpson, A. J. Adamson, P. Olivier, N.**



- Wareham, N. G. Forouhi and S. Brage (2019). "[Validity and reliability of an online self-report 24-hour dietary recall method \(Intake24\): A doubly-labelled water study and repeated measures analysis.](#)" *Journal of Nutritional Science* **8**: e29, page 21 of 29 doi:10.1017.
- **Wrieden, W.**, J. Halligan, L. Goffe, K. Barton and I. Leinonen (2019). "[Sustainable Diets in the UK—Developing a Systematic Framework to Assess the Environmental Impact, Cost and Nutritional Quality of Household Food Purchases](#)" *Sustainability* **11**(18): 4974.
 - Janssen, X., L. Basterfield, K. Parkinson, M. Pearce, J. J. Reilly, **A. Adamson** and J. Reilly (2019). "[Non-linear longitudinal associations between moderate-to-vigorous physical activity and adiposity across the adiposity distribution during childhood and adolescence: Gateshead Millennium Study.](#)" *International Journal of Obesity* **43**: 744-750.
 - Lean, M. E. J., W. S. Leslie, A. C. Barnes, N. Brosnahan, G. Thom, L. McCombie, C. Peters, S. Zhyzhneuskaya, A. Al-Mrabehm, K. G. Hollingsworth, A. M. Rodrigues, L. Rehackova, A. J. Adamson, F. F. Sniehotta, **J. C. Mathers**, H. M. Ross, Y. McIlvenna, P. Welsh, S. Kean, I. Ford, A. McConnachie, C. M. Messow, N. Sattar and R. Taylor (2019). "[Durability of a primary care-led weight-management intervention for remission of type 2 diabetes: 2-year results of the DiRECT open-label, cluster-randomised trial.](#)" *Lancet Diabetes & Endocrinology* **7**(5): 344-355.
 - Rehackova, L., V. Araujo-Soares, S. Steven, **A. J. Adamson**, R. Taylor and F. F. Sniehotta (2019 epub ahead of print). "[Behaviour change during dietary type 2 diabetes remission: A longitudinal qualitative evaluation of an intervention using a very low energy diet.](#)" *Diabetic Medicine*
 - Scott, S., C. Muir, M. Stead, N. Fitzgerald, E. Kaner, J. Bradbury, W. Wrieden, C. Power and **A. Adamson** (2020). "[Exploring the links between unhealthy eating behaviour and heavy alcohol use in the social, emotional and cultural lives of young adults \(aged 18–25\): A qualitative research study.](#)" *Appetite* **144**: 104449.
 - Sniehotta, F., E. Evans, K. Sainsbury, **A. Adamson**, F. Becker, H. Brown, S. U. Dombrowski, D. Jackson, D. Howel, K. Ladha, E. McColl, P. Olivier, A. J. Rothman, A. Steel, L. Vale, R. Vieira, M. White, P. C. Wright and V. Araujo-Soares (2019). "[Behavioural intervention for weight loss maintenance vs. standard weight advice in adults with obesity: a randomised controlled trial in the UK \(NULevel Trial\).](#)" *PLOS Medicine* **16**(5): e1002793.
 - **Mathers JC.** [Obesity and bowel cancer: from molecular mechanisms to interventions.](#) *Nutr Res.* 2019 Oct;70:26-31. doi: 10.1016/j.nutres.2018.08.004. Epub 2018 Sep 1. Review. PubMed PMID: 30274687.
 - ElGendy K, Malcomson FC, Bradburn DM, **Mathers JC.** [Effects of bariatric surgery on DNA methylation in adults: a systematic review and meta-analysis.](#) *Surg Obes Relat Dis.* 2019 Oct 11. pii: S1550-7289(19)31034-2. doi: 10.1016/j.soard.2019.09.075. [Epub ahead of print] PubMed PMID: 31708383.

- Babateen AM, Shannon OM, **Mathers JC**, Siervo M. [Validity and reliability of test strips for the measurement of salivary nitrite concentration with and without the use of mouthwash in healthy adults](#). Nitric Oxide. 2019 Oct 1;91:15-22. doi: 10.1016/j.niox.2019.07.002. Epub 2019 Jul 8. PubMed PMID: 31295558.
- Farrell, C., McNeilly, A.D., Fournier, P., Jones, T., Hapca, S.M. **West, DJ.** & McCrimmon, R. A randomised controlled study of high intensity exercise as a dishabituation stimulus to improve hypoglycaemia awareness in people with type 1 diabetes. *Diabetologia*, in press.
- Hill TR, Verlaan S, Biesheuvel E, Eastell R, Bauer JM, Bautmans I, **Brandt K**, Donini LM, Maggio M, Mets T, Seal CJ, Wijers SLJ, Sieber C, Cederholm T, Aspray T. [A vitamin D, calcium and leucine-enriched whey protein nutritional supplement improves measures of bone health in sarcopenic non-malnourished older adults](#) – the PROVIDE study. Calcified Tissue International 2019, ePub ahead of Print.
- Watson AW, Houghton D, Avery PJ, Stewart C, Vaughan EE, Meyer PD, de Bos Kuil MJJ, Weijs PJM, **Brandt K.** [Changes in stool frequency following chicory inulin consumption, and effects on stool consistency, quality of life and composition of gut microbiota](#). Food Hydrocolloids 2019, 96, 688-698.
- Shannon OM, Grisotto G, Babateen A, McGrattan A, **Brandt K**, Mathers JC, Siervo M. [Knowledge and beliefs about dietary inorganic nitrate among UK-based nutrition professionals](#): development and application of the KINDS online questionnaire. BMJ Open 2019, 9(10), e030719.
- Liberman K, Njemini R, Luiking Y, Forti LN, Verlaan S, Bauer JM, Memelink R, **Brandt K**, Donini LM, Maggio M, Mets T, Wijers SLJ, Sieber C, Cederholm T, Bautmans I. [Thirteen weeks of supplementation of vitamin D and leucine-enriched whey protein nutritional supplement attenuates chronic low-grade inflammation in sarcopenic older adults](#): the PROVIDE study. Aging Clinical and Experimental Research 2019, ePub ahead of print.
- Verlaan S, Maier AB, Bauer JM, Bautmans I, **Brandt K**, Donini LM, Maggio M, McMurdo MET, Mets T, Seal CJ, Wijers SLJ, Sieber C, Boirie Y, Cederholm T. [Sufficient levels of 25-hydroxyvitamin D and protein intake required to increase muscle mass in sarcopenic older adults - The PROVIDE study](#). Clinical Nutrition 2018, 37(2), 551-557.
- **Brandt K.** The impact of organic agriculture on diet and health. In: Köpke,U, ed. Improving organic crop cultivation. Cambridge, UK: Burleigh Dodds Science Publishing Limited, 2018, pp.25.