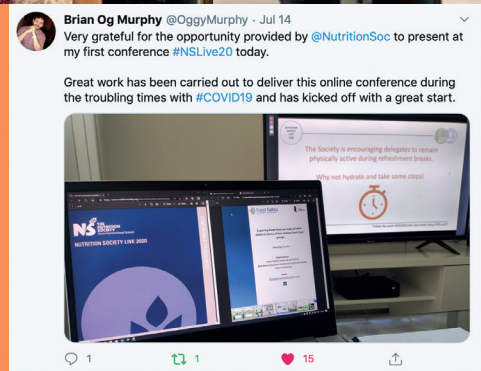
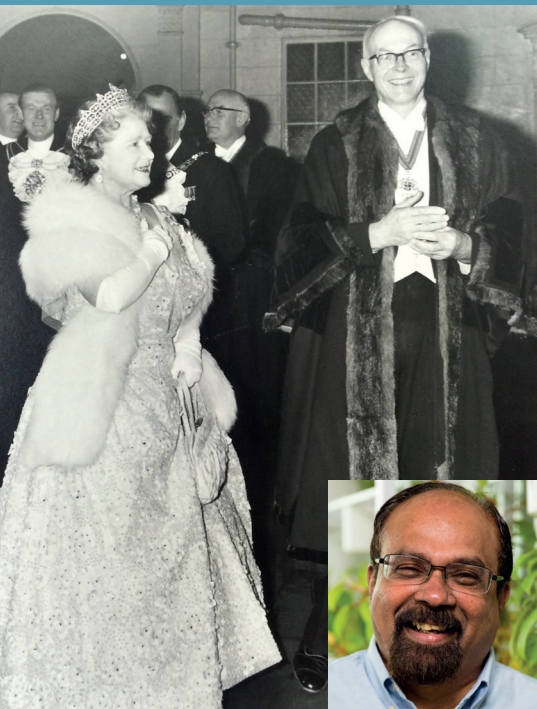




THE NUTRITION SOCIETY GAZETTE

Summer 2020



Gut Microbiome: a new journal

- The Academy of Nutrition Sciences
- Nutrition Society Live 2020
- Twenty-five years of the Hugh Sinclair Unit

Contents

From The President	3
Publications: Gut Microbiome	4
New Trustees	5
The Academy of Nutrition Sciences	6
CEO Update	7
Personal Reflection: Dr Elsie Widdowson	8
Nutritional Discoveries: UK Food Composition tables	10
Nutrition Society Training Academy	11
Nutrition Society Live 2020	12
Nutritional Discoveries: The Hugh Sinclair Unit	14
Membership: Member Reflections	16
Nutritional Discoveries: Dunn Nutrition in Cambridge	18
Student Section Update	20
Update from the Irish Section	21
Theme Leader Update	22
Obituaries	22
Membership Spotlight: London Fire Brigade's Nutritionist	23
Training and Events	24

Colour Key

UPDATES

EVENTS

HISTORY

SECTIONS

MEMBERSHIP



www.nutrition society.org

The Nutrition Society is a Registered Charity whose aim is to advance the study of nutrition and its application to the maintenance of human and animal health. Registered Charity no: 27207, Company Limited by Guarantee, registered in Cardiff, no: 1274585

Editorial

Dr Carrie Ruxton, Editor in Chief

It's been a bizarre and challenging year for all of us. We've learned to love Zoom and Teams, used new words such as furlough and R number, and found new ways of doing everyday things. As I hope this latest Gazette shows, the Nutrition Society is highly adaptable while still retaining a strong connection with our illustrious past.

This past is reflected in our contributors' articles about the Dunn Nutrition Unit (page 18), McCance and Widdowson's 'The Composition of Foods' (page 10), and the Hugh Sinclair Unit (HSU) at Reading (page 14). While the Dunn sadly closed in 1998, it is encouraging to read how HSU and the Composition of Foods are making significant contributions to the nutrition profession today.

The future, too, is evident in articles from our members, such as the London Fire Brigade's nutritionist (page 23), our President (page 3) and Trustees. We may not have met in person this year but plenty of exciting science was presented at our online summer event, Nutrition Live 2020 (page 12) and the journals are busy with submissions and the launch of *Gut Microbiome* (page 4). Plans are afoot for the Winter Conference and Nutrition Futures Live. There is much to look forward to. ■

Registered Office: 10 Cambridge Court, 210 Shepherds Bush Road, London W6 7NJ

Nutrition Society Gazette © 2020 The Nutrition Society.

Editorial Board:

Dr Carrie Ruxton, *Freelance Dietitian and Trustee for Strategic Communications*;
Cassandra Ellis, *Nutrition Society*.

Founders:

Sir Joseph Barcroft, *Chairman of the Food Investigation Board*;
Dame Harriette Chick, *Head of the Division of Nutrition, Lister Institute*;
Professor J. C. Drummond, *Scientific Advisor to the Ministry of Food*;
Dr John Hammond, *Animal Research Institute, Cambridge*;
Dr L. J. Harris, *Director, Dunn Nutritional Laboratory, Cambridge*;
Sir Frederick Hopkins, *Professor of Biochemistry, Cambridge*;
Professor H. D. Kay, *Director, National Institute for Research in Dairying*;
Sir Charles Martin, *lately Director, Lister Institute*;
Sir Edward Mellanby, *Secretary, Medical Research Council*;
Sir John Boyd Orr, *Director, Rowett Research Institute*;
Professor R. A. Peters, *Professor of Biochemistry, Oxford*.

President's Update

Professor Julie Lovegrove, President



It's been an unprecedented time since my last report, with the many adjustments that have been essential due to the COVID-19 pandemic. Our greatest respect and thanks go to those who have worked tirelessly to treat those with the virus and reduce its impact globally.

Before recent events, I had the honour of representing the Society at several National and International events. In early November I delivered a presentation at the Pakistan Nutrition and Dietetic Society's 1st conference on Non-Communicable Diseases in Lahore, at which I gave an address to the President of Pakistan, Arif Alvi, before opening the main conference. I was extremely impressed by the high esteem in which our Nutrition Society is held in Pakistan, and by the fruitful discussions between our two Societies, and promise of future collaborations.

The British Nutrition Foundation Annual Day was held in November, and we were proud to see, our Honorary Secretary, Professor Sue Lanham-New, University of Surrey, present the prestigious Annual Lecture on the inspirations throughout her successful research career. It was announced that the winner for 2020 would be Professor Hilary Powers, another long-standing member of the Society and one of our Honorary Fellows. We look forward to Hilary's presentation later this year.

On 2-4 December we hosted our Winter Conference on 'Diet and

Digestive Disease', a collaborative venture between the British Association of Parenteral and Enteral Nutrition (BAPEN) and the British Society of Gastroenterology (BSG). It was a pleasure to jointly host this conference with our clinical colleagues in BAPEN and BSG at the Royal Society of Medicine, and to strengthen our collaborative relationship with these groups. Thanks go to the Scientific Programme Organisers: Dr Bernard Corfe, Dr Liz Williams and Dr Matthew Kurien from the University of Sheffield, Professor Ramesh Arasaradnam, University of Warwick, and the Society's staff for an exciting programme and successful conference, which attracted an audience of 241 delegates from 13 countries. Thanks also to the Society's former Archivist, Sheila Merceica, for organising such an interesting and informative archive exhibition that was enjoyed by so many of our members and conference attendees.

The Annual Irish Post-Graduate Conference was held in Dublin from 12-14 February. There were some excellent presentations from our early career researchers on a broad range of research topics. I was delighted to have the opportunity to provide an update on the newly founded Academy of Nutrition Sciences (ANS), which was officially launched at the Federation of European Nutrition Societies conference last October. This charitable organisation is an exciting new venture between four founding bodies; the Nutrition Society, British

Dietetic Association, Association of Nutrition and British Nutrition Foundation, an aim of which is to offer a consistent evidence-based voice for nutrition. At the Conference Dinner, past President, Professor Mike Gibney was delighted to see the hand-written minutes from the very first Irish Section Committee Meeting, which he founded during his Presidency, and entertained us with stories from this time.

In March, the Royal Society of Biology (RSB) celebrated its 10th Anniversary since receiving its Royal Charter, with a dinner in the impressive surroundings of the Science Museum in London. As a supporting member of the RSB, the Nutrition Society had the pleasure of hosting a table. The highlight of the evening was a presentation by Sir David Attenborough on receiving a Lifetime Achievement Award. He focused attention on the preservation of our amazing planet, the importance of biological sciences, and the need to listen to our young scientists in this pursuit.

In closing, I would like to thank you for your understanding with all of the measures and conference cancellations that were required due to the COVID-19 pandemic, and to the excellent Nutrition Society staff and my fellow Trustees and Council members for working so hard to keep the Society functioning as near to normal as possible. I hope you and your families are safe and well, and that you are able to have an enjoyable summer. ■

Gut Microbiome, a new journal specifically dedicated to the human gut microbiome

Dr Kristin Verbeke, Editor in Chief

Remember the time that at big congresses on gastroenterology and nutrition, sessions on the gut microbiome were held somewhere in a small room at the end of the building and posters on prebiotics and probiotics were consistently in the very last row. Nowadays, we have realized that the gut microbiota may impact our health from very early in life, we have learned how the microbiota educates and matures our immune system, how it may be involved to varying extent in development of disorders and non-communicable diseases, and how the gut microbiota may even influence how we feel.

This boost in microbiome research has resulted in an exponential increase in microbiome-related papers and the establishment of several journals dedicated to microbiome research. In this context, Cambridge University Press and The Nutrition Society have decided to co-publish the new journal *Gut Microbiome*. I feel privileged and honoured to have been appointed as the Editor-in-Chief of this new journal.

Gut Microbiome is a specialty journal in which high-quality articles with a core focus on the human gut microbiome are published. It aims to fill the gap of robust evidence and mechanistic knowledge that is essential to widen our understanding of the interactions between the microbiota and the host. In particular, the interaction between nutrition, the microbiome and health is critical to the journal's scope.

The editorial team

Starting a new journal is an exciting but challenging activity. One of the keys to success is the editorial board. The *Gut Microbiome* editorial board comprises dynamic and enthusiastic researchers with expertise within different aspects of the human gut microbiome. Yet, we aim to further diversify the board both in terms of expertise and geographical location. In particular, we would like to welcome colleagues based in Asia to strengthen the board.

Registered reports

In addition to research articles, reviews and commentaries on recently published articles, *Gut Microbiome* will also accept registered reports. A registered report describes the hypothesis, methods and proposed analysis of a study which is reviewed and published prior to data collection. In a second step, the full manuscript including data and interpretation can be published. This format aims to neutralize a number of inappropriate research practices. Detailed instructions and guidelines for authors are provided on the *Gut Microbiome*'s homepage.

Open access

To facilitate fast and widespread distribution, all manuscripts will be published according to an open-access policy. Research output will thus be available online at no cost for the reader immediately upon acceptance of the manuscripts. In addition, copyright is not transferred to the publisher but remains with the authors, thereby allowing them to freely distribute published papers. All manuscripts will be available through the web page of the journal and through major research databases.

The journal is now open for your submissions! ■



Introduction to your new Trustees

Dr Eileen Gibney

Trustee without
Portfolio



Hello Nutrition Society Members. I am writing as a new Trustee of the Society, to which I was elected last year. The Gazette has given me a chance to introduce myself to those of you who don't know me, and let you know how I am supporting you in my new role.

I've worked in the area of human nutrition for many years! I started with BSc in Human Nutrition from Ulster University, and then obtained a PhD from the University of Cambridge, undertaking my work at the Dunn Nutrition Unit, supervised by Professor Marinos Elia. Knowing I wanted to stay in academia I then took on post-doctoral positions at the University of Newcastle and Trinity College Dublin, working with teams led by Professor John Mathers and Professor John Scott respectively. I am now an Assoc. Professor in University College Dublin, and my research interests lie in the areas of personalised nutrition, and dietary intake data. I also conduct human intervention studies to examine the impact of consumption of food and food bioactives on markers of health.

I have had a long involvement in the Society. I joined as an undergraduate and attended the Society's conferences all throughout my post graduate studies. Realising the positive impact the Society had on my career, I wanted to help and first became involved as Editor of the Gazette, taking over from Catherine Geissler. Coming from Ireland, I then became involved in the Irish Section as Secretary. In more recent years, I was involved in Society activities as Chair of the Local Organising Committee of FENS2019. Hosting this conference in Dublin for the first time, I supported the local organisers and the Society in the development and running of the conference. It was an honour to host it in Dublin, and I hope that those who attended enjoyed it. I look forward to attending FENS2023 in Belgrade.

When the opportunity arose last year, I put myself forward as a nominee for a position on the Board of Trustees and was successful. I sit on the Board as a 'Trustee without Portfolio', which means I have no specific role, but rather support the range of ongoing activities as needed and also take on small reactive projects to support the Board. To date I have worked on updating job descriptions and developing a skills matrix for the various Trustee roles, with the aim of helping those interested in these roles in the future know what each role entails. In the coming year, I will support the Trustees in examining equality, diversity and inclusivity within the Society and embedding this into the Society's future strategy. I am delighted to be involved again and I look forward to supporting the Society in the coming years. ■

Barbara Bray MBE

Honorary Officer for
International Affairs



Last year was an eventful year for me personally. I attended a ceremony at Buckingham Palace on October 31st to receive an MBE medal from Princess Anne for services to food and nutrition. Our brief conversation touched on nutrition education in schools, cooking skills and the British Nutrition Foundation lectures.

Princess Anne's words on education and skills have stayed with me as I look at the vision for the Nutrition Society and international relations. There are Society members from countries all over the world experiencing different levels of food security, food choice and nutritional education. The nutrition professionals in those countries need our support in a range of ways.

The strategy over the next few years is to focus on four key pillars which are:

- Pillar 1.** Promote the work/activities of the Society and its members on a global scale.
- Pillar 2.** Develop and maintain interaction with overseas members (and potential members), including UK members working/living overseas.
- Pillar 3.** Assist in building the capacity of both existing and emerging overseas Societies and other scientific bodies (in both science and governance).
- Pillar 4.** Lead on, and/or participate, in special projects which would have the potential of a global impact.

Capacity building in both science and governance and special projects with the potential of global impact are aligned with the UN Sustainable Development Goals, particularly SDG 2 – Zero Hunger. Supporting nutrition societies in other countries with their growth and development has a direct impact on the community of nutrition professionals and their ability to serve their populations in the most appropriate way.

The CFS Voluntary Guidelines on food systems for nutrition policy will be published later this year and it will provide an opportunity after the COVID-19 pandemic for states to review and reform their policies. Find out more in this [short video](#) from the FAO.

Nutritionists in academia, food industry, government and healthcare will be required to translate and implement the guidelines in their national policy. Multi-disciplinary working will become the new normal and the Society is well placed to support development, disseminate scientific information and facilitate dialogue between professionals in countries across the globe. ■

The Academy of Nutrition Sciences



Professor Harry McArdle, ANS President

The amount of information, and misinformation, available on the internet on most topics is staggering. This is as true for nutrition as any other area of health and wellbeing, possibly even more so, as no-one is officially allowed to give medical advice unless appropriately qualified. In contrast, many people give “nutritional advice”, with statements and claims being made without any factual basis. Consequently, it is very difficult for the general public to sift the accurate information from the rubbish, and for them to be able to see how to understand and apply information to their lives.

There are organisations in the UK and elsewhere, however, that do provide the accurate information that people need. Government organisations such as Food Safety Scotland, Public Health England and their Welsh and Northern Irish counterparts provide public health advice and information on nutrition. Non-government organisations, such as the British Nutrition Foundation, The British Dietetic Association, The Nutrition Society, and the Association for Nutrition, the professional regulator for Registered Nutritionists, are also sources of reliable, evidence-based nutrition information.

In 2018, representatives of these four organisations met to consider what was needed to improve the knowledge and application of nutrition in the UK. They agreed that a joint endeavour would help in championing evidence-based, high quality nutrition information for the sake of public health. Accordingly, the partners decided to develop the Academy of

Nutrition Sciences. The concept quickly became reality and the Academy was launched in October 2019 as a charitable organisation. Two representatives from each of the founding member organisations were nominated to become Trustees of the new Academy, with an independent person as the chair of Trustees. The members of the Academy are the four founding organisations, and the Academy is not open to individuals to join. In the future, other organisations that adhere to the standards and values of the Academy, outlined in the Articles of Association, the Constitution and the Byelaws (www.academynutritionsciences.org.uk) will also be eligible to apply for membership.

The Academy has been set up to be complementary to the various and varied interests of its founder members, and hence will, we trust, be able to act as a nexus between them. The Academy currently has four main objectives to improve public health and wellbeing by: (1) supporting research excellence in nutrition; (2) supporting improved nutrition education in all health related professions; (3) building and improving stakeholder relationships; and (4) supporting efforts to advance the research agenda.

At this early stage, we are concentrating on priorities within these objectives. Professor Christine Williams is leading a working group that is examining guidelines for research excellence in the nutrition sciences. The four founder members are developing proposals for nutrition education in the medical curriculum, and the Academy will help

to promote their conclusions, ensuring that these are brought to the attention of the relevant professional bodies, and the universities and colleges that undertake medical teaching.

The Academy will help deliver and amplify the messages of the annual Healthy Eating Week initiative developed by the British Nutrition Foundation. This was due to take place in June but has been postponed until the end of September owing to the coronavirus pandemic (Monday 28 September to Sunday 4 October 2020). Nutrition Society members are welcome to get involved – participation is free of charge and open to all nurseries, schools, universities and workplaces.

Further details can be found on the [BNF website](http://www.bnf.org.uk).

One important area, which until recently we believe has been generally overlooked, is the relationship between nutrition and environmental sustainability. While the interactions between food systems and the environment, particularly the impact of farming, have received a great deal of attention, the potential effects of changes in our food systems on nutrition must also be addressed. The Academy hopes to be involved in ensuring that future policies on agricultural production and the environment clearly take into consideration the impact on nutrition and health, and of course, vice versa. We are currently developing discussion documents considering these relationships and would welcome input from other interested parties. ■

These are just a few of the areas where the Academy can make an important contribution to the quality and understanding of nutrition science. We are, of course, always open to suggestions and ideas from the individual members of our founder organisations, and indeed, from anyone with an interest in nutrition. For more information, please see the website www.academynutritionsciences.org.uk or contact the Academy at office@academynutritionsciences.org.uk

Where does all the money go?

Mark Hollingsworth, Chief Executive Officer

I have recently completed, with the Society's Treasurer Professor Chris Seal, the annual review of the Society's accounts. I did pause after this extensive experience to consider how much easier life must have been back in 1941, with the Society's first annual accounts – income just came from membership fees (at some £150), and expenses limited to bank charges and some minor printing costs and postage (£75). In 2019, income to the Society was £1,320,595 and outgoings totalled £1,561,305. The accounts in 1941 easily fitted on one side of paper. The 2019 accounts now run to some 30 pages and cover a complex, interdependent budget management system. Why so complex now?

The 2019 accounts show a total income of £1,320,595 with the publication of the Society's five Journals netting 82% of that at £1,085,571. Membership fees of £73,398 (6%), Scientific Meetings at £100,772 (7%), the Training Academy generated £23,865 (2%), royalties from the series of six textbooks totalled £12,723 (1%), and income from the Society's investment portfolio was £24,266 (2%). A concern here is the high dependency the Society has on its income from Journals – the 82%. Diversity of potential income sources is regularly reviewed by the Trustees as a way of reducing this percentage.

Every single pound coming into the Society is considered for one of three priorities:

1. Covering the basic operating costs of the Society.
2. Supporting special projects and member activities.
3. Building strong reserve funds.

Priority One. The Society's basic budget principle is that it should be able to cover its basic 'operating' costs from membership fees and income from Journal sales. In 2019 these costs came to £818,647 – so a comfortable margin of £340,322 (30%) left from that income can be used for Priority Two.

Priority Two. In terms of expenditure in 2018 and 2019, significant funds from the annual surplus and reserves have been used by the Trustees to support member activities and projects. For example, up to £250,000 a year is allocated to reduce the costs of Scientific Conferences, helping to keep delegate fees low. In addition, funds have been allocated to a research Fellowship with the Daphne Jackson Trust (£60,000 over two years), creation of the Summer Studentship programme (£100,000 in studentships granted in three years), and the Travel Grant Scheme for members expanded to £12,000 per year (valued at up to £600 per member).

Furthermore, supporting the work of international members and societies has always been a strategic priority. Over the past three years, support has been given through grants to, and conferences in, Morocco, Rwanda, Ethiopia, Tanzania, Kenya, Argentina, China, Spain, Korea, USA, Brazil, Dubai and Georgia. In 2019, the Society invested £75,723 in international work. These projects also help to promote globally the Society's Membership, Journals and Textbooks, which then translate into increased sales and revenue, helping to fund future projects.

Priority Three. In addition to managing income and expenditure, it is also necessary to ensure that cash reserves are built up to a level where they can be used to support special projects. Between 2014 and 2017, the Trustees decided to use the surplus income each year mainly to build this reserve fund – they succeeded in creating a cash reserve of just over £1million, which now generates £24,000+ in additional revenue per year.

So, if you have ever wondered where the fees you pay for membership, or for a webinar or scientific meeting are spent, hopefully this article shows they are a much-needed component of a complex system which ultimately supports a wide range of UK and global nutrition science activities. ■

Dr Elsie Widdowson

2000-2020

Professor Margaret Ashwell

Introduction

This year, 2020, marks the twentieth anniversary of Elsie Widdowson's death. So much has been written about what this remarkable lady achieved while she was alive^{1,2}, I thought I would tell you about how her name has lived on all these years later.

Buildings and rooms in her name

Let's start with the Elsie Widdowson Laboratory. In 1998, as a result of the restructuring of the MRC Dunn Nutrition Unit in Cambridge and following the retirement of Professor Roger Whitehead, MRC Human Nutrition Research (HNR) was formed. Elsie was invited by the Director of HNR, Dr Ann Prentice, to turn the first sod on the building site in 1999 and the HNR building was named "The Elsie Widdowson Laboratory" when it opened in 2001. Unfortunately it was closed by the MRC at the end of 2018 (find out more on pages 18-19).

Not many people know that when the newly formed Food Standards Agency

moved into Aviation House in London, they wanted to call the building Widdowson House. Unfortunately their landlords, the Civil Aviation Authority, would not agree to this and so they named their library after Elsie in 2002. I was happy to contribute much of my Elsie memorabilia to this library and to help them prepare a poster about Elsie's life. However, with the move of nutrition to DoH and then PHE, the memorabilia were returned to me a couple of years ago. Luckily all the work on the poster is not lost because the Nutrition Society has stepped in. The poster has been adapted and displayed with the memorabilia in the Elsie Widdowson Conference Room within the newly refurbished Boyd Orr building. This will now be opened later this year.

Lectures and scholarships in her name

To my knowledge, two annual lectures have been set up in Elsie's honour. The BDA launched an annual memorial lecture in 2001 and in 2004 the Neonatal

Society decided to name one of its regular lectures in honour of Elsie too.

Elsie was always most supportive of women in research. She realised that it was often very difficult for women to keep their research careers going after they had children, especially if they had other commitments such as teaching. This is why Elsie asked that a Fellowship Award should be set up in her name at Imperial College London, where she had completed her own undergraduate and post graduate degrees. The purpose of the Award is to allow academic staff to concentrate fully on their research work upon returning from maternity, adoption, surrogacy and/or shared parental leave.

TV and radio programmes about her

The BBC Radio 4 "Archive Hour" approached me in 2002 for some recordings of Elsie to put into a programme about her. I had quite a few as cassette tapes (recordings made for Woman's Hour, The Food Programme etc.), and I'm pleased to say I used this as an opportunity to get the BBC to make digital versions of these which are all now in the safe hands of the Nutrition Society. There are two recurring questions in these interviews: The ease of simply deciding to do a piece of research without any applications for grants, and the absence of any ethical rules concerning human experimentation.

In 2013, I helped with episode 8 in the first series of "Absolute Genius with Dick & Dom" which was devoted to Elsie. Other episodes were devoted to famous scientists such as Isambard Brunel, Isaac Newton and Michael Faraday, so Elsie was up there with the scientific greats! This CBBC programme was aimed at 9-13 year olds and has been used for teaching science at Key Stage 2. Do watch this programme if only for the wonderful caricatures of Elsie. She would have absolutely loved it! It's still available on You Tube.



L-R Professor Margaret Ashwell, Dr Helen Sharman and Matthew Parris talking about Elsie for 2017 Great Lives.



Professor Robert McCance and Dr Elsie Widdowson, outside Elsie's cottage in Barrington, Cambridgeshire, in September 1990.

In 2017, BBC Radio 4 devoted an episode of “Great Lives” to Elsie. She was the choice of our first British astronaut, Dr Helen Sharman, not only because she was food scientist before she went into space, but because she now directs the Chemistry Department at Imperial College. Dr Sharman was fascinated to learn more about the lady who had given her name to the Fellowship I previously mentioned. The programme was presented by Matthew Parris and the three of us had a delightful time recounting many stories about Elsie. I also enjoyed telling Helen how much Elsie had admired her when she went into space in the Russian ship Soyuz in 1991 because I can well remember Elsie's delight that Helen was a woman scientist. Although broadcast first in 2017, the programme is still available as a podcast on BBC Sounds.

Exhibition at the Science Museum

In 2015, I was asked to contribute information about McCance and Widdowson's testing of potential rations for an exhibition called “Churchill's Scientists” at the Science Museum in London. It was to commemorate Churchill's 140th birthday and look at scientific developments directed by him during his time as Prime Minister. I pointed out that Churchill didn't actually ask M&W to test rations. In Elsie's words: “We felt we must do something to further the war effort”. Although the research, started in September 1939, was over by January 1940 and the report written and presented to MRC in March 1940, it was not actually published until 1946.

Articles written about the adventures portrayed in her personal diaries.

I was lucky enough to inherit several diaries that Elsie had kept of her trips abroad. One of these was about her trip to the USA and Canada in 1936. I thought it would be interesting to follow up on some of these places and so I enlisted Professor Johanna Dwyer's help³. Elsie visited 17 different places from New York to Toronto and saw more than 50 researchers in a 2-month period. Incredible! All that planning with no phones or email! There are meticulous accounts of the science that was going on in each of the laboratories. My favourite conversation was with the compiler of the USDA Food Tables. Elsie remembers: “I remember Miss Chatfield and I discussed whether it was better for compilers like herself to prepare tables from the published work of others, or for people like myself, who had analysed the foods, to make the tables. I was in my 20s at the time and very much Miss Chatfield's junior. She was rather a forceful person and thought she had won the argument, but she did not convince me!” I was also rather taken by Elsie's comment that her trunk had still not arrived on May 6, even though she travelled to USA on April 15.

The other diary was her handwritten account of the trip that she and McCance took to Holland and Germany immediately after the war. This came about because Sir Edward Mellanby, then head of MRC, said “There must be a lot of hungry children in Germany. You go and find out the truth about

this”. Ursula Arens has written two accounts of this trip, the most recent focussing on some of the secrets revealed by the diaries^{4,5}.

A blue plaque in her name

Just after Elsie died, I asked Cambridge City Council for a blue plaque to commemorate her life. I discovered that the person has to be dead for 10 years before a plaque can be considered and I promptly forgot all about the idea – for nearly 20 years! Anyway, I resurrected the idea last year, raised the money required (thank you Nutrition Society, BNF and BDA), and the plaque is ready to go. We have decided to put it in Barrington, where Elsie lived, as everywhere she worked in Cambridge no longer exists. We were hoping that the unveiling ceremony would be in June 2020 to coincide with the 20th anniversary of Elsie's death, but it now looks as though it will have to be postponed (the Nutrition Society e-newsletter will publish the date when known).

Endpiece

Recalling all these projects has made me realise how, for the last 20 years, recalling Elsie's life has become a very important part of my own life. If asked, I always say that editing the biography of McCance and Widdowson was the best idea I have ever had. Doing the research for it allowed me to meet so many of her scientific friends who became my friends too. And, as you can see, the last twenty years have allowed me to become involved in a wonderful variety of different projects, which have all been great fun.

1. Widdowson EM. Adventures in nutrition over half a century. *Proc Nutr Soc.* 1980;39(3):293-306.
2. Ashwell M, ed *McCance and Widdowson – A Scientific Partnership of 60 Years*. London: British Nutrition Foundation; 1993.
3. Ashwell M, Fialkoff L, Berdanier C, Dwyer J. Highlights from Elsie Widdowson's personal diary of her meetings with early US nutrition pioneers in 1936 *Nutrition Today*. 2016;51(2):93-101.
4. Arens U, Ashwell M. The importance of tender loving care: Elsie Widdowson's research in Germany. *NHDMag*. 2015;July:11-12.
5. Arens U. Snooping into the Diary of McCance and Widdowson. *Dietetics Today*. 2019.

80 years of UK Food Composition tables

Jenny Plumb, Quadram Institute



2020 will see the 80th anniversary of the publication of the first edition of McCance and Widdowson's, *The Composition of Foods*. With each edition and supplement our knowledge on the nutrient composition of the foods grows, alongside changes in the UK diet and developments in the food industry. We have now reached the 7th edition in book form and the full dataset also now available in a searchable website, <https://quadram.ac.uk/ukfoodcomposition/>. With the anniversary of the first edition in mind, we wondered how the approach to data compilation has changed over the years, so we met with Alison Paul, author of the 4th Edition, to find out.

Since the late 1970s, when Professor David Southgate moved to Norwich, the UK data compilation has been based at Quadram Institute Bioscience (QIB) (previously known as the Institute of Food Research). Currently the information is produced and curated by the Food Databanks National Capability, led by Paul Finglas and funded by the UK Government, in collaboration with the Royal Society of Chemistry.

Before moving to Norwich, David Southgate produced the 3rd Edition, published in 1960, which included processed foods, vitamins and amino acids for the first time. On moving to the Dunn Nutrition Unit, David was joined by Alison Paul, a Queen Elizabeth College trained nutritionist on secondment from the Ministry of Agriculture, Fisheries and

Food (MAFF). Together they produced the 4th edition in 1978, for which around two thirds of foods were re-analysed and for a while it became known as the Paul and Southgate edition.

Hannah Pinchen, author of McCance and Widdowson's (M&W) 7th edition, was delighted to have recently spent some time with Alison Paul in the Quadram Institute comparing and contrasting how creating the food tables has changed over the past 40 years. They discussed the new foods entering our diet over the years, sampling and analysis, and how lucky we are today to have computers! Some of the highlights of the discussion are detailed below, and we are happy to now be the custodians of Alison's work archives from 1969-1976.

Foods, Sampling and Cooking:

Currently, Food Databanks carry out all the sampling of foods for analysis. As an example, in order to produce a typical figure for the composition of UK eggs we had to sample over 2000. For tomatoes, we visited ten different supermarkets as well as independent shops and market stalls – all at least twice. Alison told us how, in the 1970s, she struggled to find the new foods that were appearing in our diet as it changed post war, such as lentils and dahl. Hannah observed a similar problem trying to find yams in Norwich. Both Alison and Hannah regularly received strange looks when their trolleys were filled with multiples of the same item. For cooking, the MW4 project used six domestic science

colleges around the country (Scotland, Liverpool, Bath, London, Wales and Cambridge); these days all cooking is carried out on site at QIB. The waft of our culinary smells means we are loved by colleagues when cooking cakes but loathed when boiling fish before analysis.

Recipes: 40 years ago, recipes were tested and cooked at home or by the Cambridge domestic science college. On one occasion while testing the fish pie recipe, Alison cooked one and asked her flatmates if it tasted ok. She found within moments they had eaten it all and concluded that it was the correct ingredient combination! When producing new data, we revise recipes based on current tastes and ingredients, such as replacing lard with other fats and reducing salt quantities.

Laboratory Analysis and Calculations:

Comparison of our analytical methods flagged up that many similar problems persist over the years, for example vitamins in meat fat are still difficult to analyse. In the 1970s, the laboratory found analysis of B vitamins in the meat fat so difficult that they could not produce reliable results. The absence of computers in the 1970s meant everything was calculated by hand, with the DUNN employing undergraduates and a calculation pool to calculate the nutrition content of recipes. The life of a food data compiler has definitely improved thanks to computers.

Publication: For the 4th edition, formatting was carried out on lined paper,



Nutrition Society Training Academy (NSTA)

Penny Hunking,
Honorary Training Academy Officer

It need hardly be said that research of this nature is technically exacting and at the same time extremely laborious. Almost every substance to be analysed brings up fresh problems, and the solution of these problems may take weeks or even months. It is work which appeals to relatively few investigators, for the road is long and there is little prospect of making interesting discoveries by the way. Nevertheless, the completion of these detailed analyses of British foods represents a contribution to knowledge which is likely to be widely appreciated, and the Council are glad to issue the results as a Report in their Series.

Medical Research Council,
38 Old Queen Street,
Westminster, S.W.1.

8th November, 1939.

written by hand by Alison with her best fountain pen. This went directly to the printer for creation of proofs, which were checked by Alison reading it out loud to David Southgate every afternoon. The M&W4 cover photo is of the lab at the DUNN, with the proofs of the 4th edition seen in the background. Again, thanks to computers, it is now much simpler for us to produce a print ready version for the Royal Society of Chemistry to publish.

Timescale: It took Alison seven years to complete the 4th edition, from starting work, to the publication of the book, with two years dedicated just to completing the meats. Nowadays, updates are simpler as publication is quicker and easier with the online resource, so we have a rolling program of updates. However, we do know that there is nothing better than flicking through the book!

Regulations: The data created for the M&W series allow for dietary analysis and the creation of public health messages. Alison has paperwork showing the public health message in the 1960s was not to eat too much sugar. Some things never change.

It's worth finishing with the preface from the first version to show that the thinking and work behind the compilation of Food Composition tables has not really changed in 80 years. "... research of this nature is technically exacting and at the same time extremely laborious. Almost every substance to be analysed brings up fresh problems and the solution may take weeks or even months".

At Food Databanks we proudly carry on in the footsteps of McCance, Widdowson, Southgate and Paul, because we know that the dataset is widely appreciated and is the backbone of public health nutrition and food and health research in the UK and beyond. ■

You can access the McCance and Widdowson's The Composition of Foods Integrated Dataset on the PHE website:
www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid

When the decision was made for the Society's Training schedule to be taken online in the form of webinars, it was a significant change after years of hosting workshops at the Society's London offices. This decision was triggered by a change in the way in which the membership was engaging with the Society, but also in looking to continually deliver the best possible effective offerings for the membership. By transferring training content online through the Training Academy (NSTA), it was hoped that the Society's mission of enhancing the scientific study of nutrition and its application to the maintenance of human and animal health would be more achievable. Now, the travel element has been eliminated along with reducing the associated costs and time spent away from offices and homes. The NSTA has resultantly reached over 35 countries with its training offerings, from its membership representation across 80 countries.

Back in 2018, nobody could have predicted the unprecedented times the world would face in 2020; potentially changing the way in which nutrition professionals, scientists and the global population now operate. With the NSTA already established online, it was immediately recognisable that the Society could and would continue to deliver its training objectives despite remote working. Staff and webinar hosts were still able to operate irrespective of location to deliver the Society's training, whilst all attendees were able to adhere to the government guidelines in place without hesitation. Since then, the NSTA has seen engagement increase, thanks to a committed membership base looking to enhance their CPD, despite the times surrounding us. This is so encouraging at a time when research-evidenced based information is more important than ever.

In those challenging times when the difficult decision to cancel the Society's annual Summer Conference was made; the flagship networking opportunity amongst members, it was quickly realised that the Society's various sectors (training, conferences and publications) could work together to deliver an online event to bring the membership together, even from afar. Resultantly, Nutrition Society Live 2020 was launched. Whether you attended or are interested to hear about the potential for future 'Nutrition Society Live' events, the following article provides a snapshot of how members and colleagues came together to hear the latest scientist, engaged with Original Communications and networked with old friends and colleagues, irrespective of unprecedented barriers. ■

Nutrition Society Live 2020

Led by the *Nutrition Society Training Academy (NSTA)*, Nutrition Society Live 2020 was an innovative ‘virtual’ nutritional science event created in response to the cancelled Summer Conference due to the COVID-19 pandemic. With the main priority being the safety of delegates and speakers, #NSLive20 allowed the Society to continue its mission of advancing nutritional science by providing a platform for sharing research and collaborating with others in the nutrition community.

Over 450 delegates from across the world joined #NSLive20 from their homes to attend two days of excellent lectures, workshops, virtual abstract presentations and live panel discussions.

Discussing the topic of “Protein”, the diverse programme explored aspects related to the physiological determinants for protein requirements including novel methods for assessing protein metabolism, and the impact of protein sources on the environment. In addition to the main programme, delegates were able to access interactive abstract presentations and network through the recently launched *Member-Connect*. The debate continued across social media using #NSLive20 and members were keen to share their experience.

Speaker reviews and Original Communications will all be published in *Proceedings of the Nutrition Society*.

 **454**
delegates

 **36**
countries



President, Professor Julie Lovegrove joined from home

Excellent conference and well organised. Have actually connected with others – for some reason even better than I have done over years of attending live events. Enjoyed the broad areas covered – interdisciplinary approach to protein, health and environmental research was much appreciated. Thank you!

Dr Theocharis Ispoglou @Theo_Ispoglou
 Fantastic organisation by @NutritionSoc of the first Nutrition Society Live Event #NSLive20. Excellent and engaging talks, and so much food for thought by the end of day 1. Looking forward to day 2! Thank you
 5:09 PM · Jul 14, 2020 · Twitter for Android
 2 Retweets 8 Likes

Oliver Witard @OllyWitard · Jul 14
 Replying to @Theo_Ispoglou and @NutritionSoc
 Completely agree Harry and some excellent questions from @KostasProko !
 2 3

Konstantinos Prokopoulos @KostasProko · Jul 14
 Thank you @OllyWitard !!
 2

Konstantinos Prokopoulos @KostasProko · Jul 14
 Replying to @Theo_Ispoglou and @NutritionSoc
 Looking forward to your presentation! 🙌🙌
 2



Honorary Training Academy Officer, Penny Hunking attended from her home office



Liz Williams
@LizWilliamsRNut

Thanks to @NutritionSoc, speakers, chairs and organisers for #NSLive20. Great content, stimulating discussion and an incredibly efficient use of time.....I even made it 'back in time for tea'. Huge appreciation. Great job.

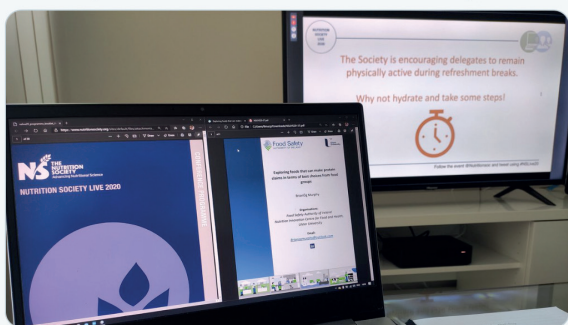
I thought it was a fantastic way to keep our conferences going throughout this pandemic. It normalised our current situation to some extent and was lovely to listen to various international nutrition researchers once again!



Brian Og Murphy @OggyMurphy · Jul 14

Very grateful for the opportunity provided by @NutritionSoc to present at my first conference #NSLive20 today.

Great work has been carried out to deliver this online conference during the troubling times with #COVID19 and has kicked off with a great start.



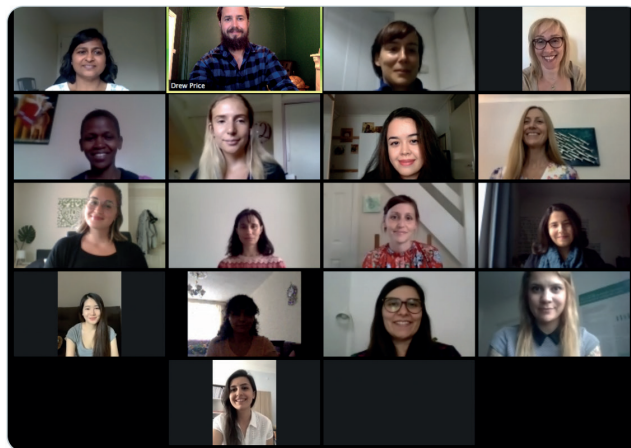
1 comment, 1 retweet, 15 likes



Drew Price
@Drewtrition

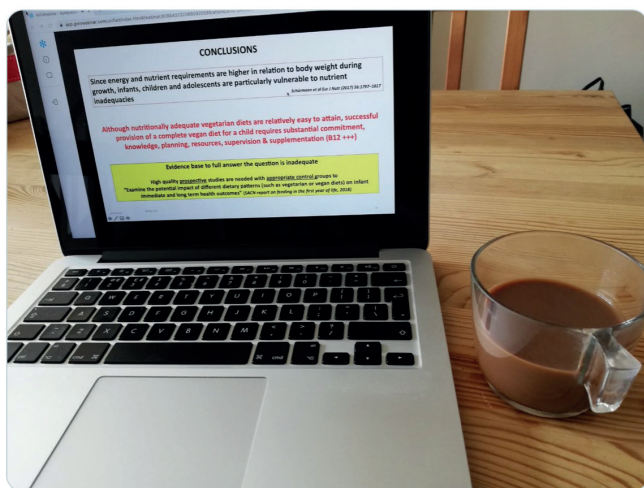
Lovely to see our Nutrition Research Group's attendees for @NutritionSoc's #NSLive20. It's always great to see so many colleagues faces in one place. I miss you guys!

@UniRdg_FNS @UniRdg_HSU @UniofReading @UniRdg_IFNH #nutrition #nutritionresearch



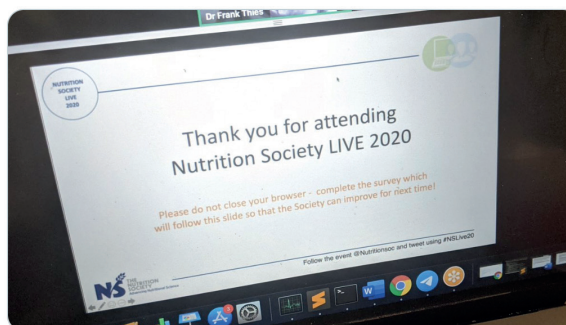
Thanasis Koutsos
@ThanasisKoutsos

My last coffee break for today following an exciting talk about "risk and benefits of vegetarian diets in children" by Prof Mairead Kiely #NSLive20



Nourhan Barakat @Nutrition41fe · Jul 15

I really enjoyed every single talk. Brilliant and informative information and findings. Great thanks to all the speakers and organisers #NSLive20



5 likes

Twenty-five years of the Hugh Sinclair Unit, University of Reading, 1995-2020

Dr Michelle Weech, Dr Roz Fallaize
Hugh Sinclair Unit of Human Nutrition,
Department of Food and Nutritional Sciences, University of Reading.

The Hugh Sinclair Unit of Human Nutrition (HSUHN) is part of the Department of Food and Nutritional Sciences at the University of Reading. This internationally recognised centre of excellence in nutrition research and teaching was founded in 1995, using estate funds endowed by the late Professor Hugh Macdonald Sinclair (1910-1990), a pioneering nutritional scientist.

During World War II, Professor Sinclair led the Oxford Nutrition Survey, working with the Ministry of Health to ensure the nutritional requirements

of the British population were met. He was a passionate advocate of the importance of diet on health promotion and disease prevention, and was one of the first academics to hold a title in the discipline of nutrition in the UK (Reader in Nutrition 1951, Magdalen College, University of Oxford). It was during this time that this life-long research interest into the benefits of long chain n-3 polyunsaturated fatty acids developed.

Despite his original theories being met with considerable scepticism (Sinclair, H.M. Deficiency of essential fatty acids and atherosclerosis etc. *Lancet*,



Dr Hugh Macdonald Sinclair

1956;270:381-383), his pioneering research created a foundation behind current recommendations for the regular consumption of oily fish for the prevention of cardiovascular disease. Lacking funding for his renowned 'Eskimo experiment', the 69-year-old Sinclair resorted to self-testing his theories by only consuming seal meat, fish and water for 100 days. Throughout the experiment, he would cut his arm, under controlled conditions, to measure his blood clotting time, which increased remarkably from 3 to 57 minutes. In the latter stage of his life, Hugh Sinclair was appointed visiting Professor of Nutrition at the University of Reading until his death in 1990. After a successful application for the endowment of funds from Hugh Sinclair's estate, the HSUHN was established at the University of Reading in 1995.

Over the past 25 years, researchers within the HSUHN have continued Hugh Sinclair's legacy, with the mission of strengthening the evidence base for dietary recommendations for the prevention of chronic diseases. This mission has been underpinned by specialisms and expertise in cardiometabolic health, public health nutrition, diet and cognition, immunity and inflammation, and food sustainability.



A sketch by Dr Hugh Sinclair depicting a trip to Greenland to investigate diet heart disease and cancer in the Inuit population with his colleagues: Dr Jørn Dyerberg, Ivars Sius, Jonas Malakiason and Dr Ho Bang.



Dr Hugh Sinclair meeting the Queen Mother.

Cognitive Function Room, a kitchen and two volunteer areas, as well as fully equipped laboratories. Since the HSUHN opened in 1995, its staff count has increased from the original three founding members to over 65, many of whom hold key external positions as experts in the field of nutrition, including committee members for BBSRC, Scientific Advisory Committee on Nutrition (SACN), Committee on Toxicity (COT), Association for Nutrition (AFN) and European Food Safety Authority (EFSA). To date, three Chairs of the HSUHN have been appointed: Professors Christine Williams OBE (1995-2006), Ian Rowland (2006-2013) and Julie Lovegrove (2014-present). While leading the HSUHN, both Professor Williams (1998-2001) and Professor Lovegrove (2019-present) were appointed President of the Nutrition Society.

Research from the HSUHN has made a key contribution to the current evidence base and development of policy on diet and health.

For example, it has helped to establish the detrimental effects of dietary saturated fat on risk factors for cardiovascular disease, and identified the health benefits of replacing saturated fats with unsaturated fats. It has also produced key evidence to support the role of flavonoids in fruits and vegetables in improving cognitive function and vascular health. This research has been made possible by the application of state-of-the-art techniques and funding from UK Research Councils, European Union, charities, and by numerous national and international collaborations with other academic centres of excellence in nutrition, and the food industry. From a teaching perspective, the HSUHN supports Masters degree in Nutrition and Food Science and three BSc nutrition-focused degrees, which are

extremely popular with UK-based and overseas students.

The HSUHN's clinical unit houses eight clinical rooms, including a dedicated Vascular Suite, Imaging Unit and

In the future, nutrition will continue to play an important role in the health of the nation, and the HSUNU will continue its endeavour to provide robust scientific evidence to support dietary guidelines for chronic disease prevention for many years to come. ■



Past and present Hugh Sinclair Chairs in Human Nutrition. Right to left: Professors Christine Williams (1995-2006), Ian Rowland (2006-2013) and Julie Lovegrove (2014-present).

Member Reflections

Members form the heart of the Nutrition Society, representing all key areas of nutrition research and careers. The Membership Committee continue to work to improve the member experience and benefits.



Honorary Membership Officer, Dr Dean Sewell, reflects on his time as a member:

Meeting nutrition researchers and practitioners, continually learning and keeping nutrition knowledge up to date – these are some of the reasons I became a member of the Society. My membership journey began in 1993 whilst working in Nottingham, and I have been a member since then. During those 27 years I have briefly worked in industry in the Netherlands, and, for the longest part of my academic career, in Scotland. It was possible during that time to contribute to the Scottish Section Committee, to Advisory Council, and more recently to Nutrition Society Trustee roles. My journey has taken me to a fair number of conferences. I think my first conference was in Cork, Ireland, I've been the local organiser for Spring and Summer conferences in Edinburgh, been to Spain (for the Granada IUNS meeting) and recently to Dublin for FENS 2019. A memorable nutrition journey full of knowledge and experience gained, good food, and good company. ■

The Membership Committee asked you why you value your membership:

"The Nutrition Society generates a real sense of community and since relocating from the UK and now being based internationally, I still feel a part of this community. Being a member of the Society allows you to meet new people, network with leaders in the field and celebrate accomplishments of the nutrition community."

Dr Taryn Smith USA



"I think the feature of webinars for members of LMICs makes me more actively participate in Society activities by joining the journal club and attending webinars. What I like most is attending a great webinar and receiving the one-page summary."

Dr Ei Mon Phyo Myanmar

"I love the monthly newsletter and the access to the Society Journals as it really helps me keep up to date with the most recent and relevant research in nutrition."

Fariyah Choudhury UK



"In addition to being able to apply for grants to attend conferences (which I did in 2015), I am able to network with other top experts in nutrition research and exchange ideas. This really helps me a lot in my academic career."

Dr Zheng Fei Ma China



I came to UK in the summer of 1978, on a scholarship to read Human Nutrition at the London School of Hygiene and Tropical Medicine (LSHTM). Almost from the first day at LSHTM, Professor John Waterlow, The Godfather of British Nutrition, took me under his wing. Subsequently, I was nurtured by many at LSHTM including Professor Philip Payne, Professor Andrew Tomkins, Professor David Nabbaro and Professor David Thurnham.

It was a golden era – at no time did I feel discriminated or disadvantaged. If anything, I was provided unbridled support and encouragement. Under the watchful eye of late John Rivers, Professor Derek Miller and Professor Catherine Geissler, I became a member of the Nutrition Society in 1978. I presented my first oral presentation at a Nutrition Society conference in 1979. I continued to hold several office positions within the Society – Council Member, Secretary of the International Group. I was on the Editorial Board member of the *British Journal of Nutrition* for several years.

In 1980 after completing my MSc, with support from both Professor Roger Whitehead, and Dr Elsie Widdowson, I secured funding for a Ph.D. at LSHTM. I was also awarded an UK Overseas fee support grant by the British government. After my PhD, due to the civil war, I was unable to return to Ceylon (now Sri Lanka) and applied for a lectureship at Oxford Brookes. Despite a short list of over 12 candidates, I was selected for the position. The leadership at Oxford Brookes was extremely supportive of my research and Academic activities, this culminated in being made a full Professor at the age of 45.

My academic trajectory in UK was supported by many actors, too many to name. By open competition, I was elected to be on the panel for International Grants Committee of UK Department for International Development (DFID) Similarly, in 2000, I became a Board Member of the first UK Food Standards Agency (FSA). In 2005, I was made a Member of the Scientific Advisory Committee on Nutrition (SACN). In 2010 I won the Rank prize lecture award, and the was awarded the British Nutrition Foundation award in 2010-11.

These examples are not meant to eulogise my achievements, but to endorse the unconditional and substantive support I had from my colleagues in the UK. It this unique collegiality that we now need to preserve for today and tomorrow. It is clearly a time of contention today. But we must continue our faith in the goodness of mankind.

Please use my story in any way you see fit. This is the least I can do to give back to UK what UK has given me. I am proud to be a British citizen and want to make sure we still remain not only a unified nation, but a nation of all colours of the rainbow. This is why in years to come, we still call Britain, Great Britain.

Keep up the good work and please convey my warm wishes to all members of your Council and Trustees.

Warmest regards,

Jeya Henry,
Senior Advisor, Singapore Institute of Food and Biotechnology Innovation Professor, Dept. of Biochemistry, National University of Singapore

The Society Trustees were delighted to see a recent letter received by Professor Julie Lovegrove, the Society's President, from long-standing member, Professor Jeya Henry in Singapore, who described his past experiences of coming to live and work in the UK as a nutrition scientist.

Ms. Barbara Bray, Honorary International Affairs Officer, commented:

I would like to thank Jeya, an international member of the Nutrition Society for his correspondence in response to [the Society's letter](#) published on equality, diversity and inclusion in June this year.

His letter illustrates the importance of working together and for senior people in the nutrition community to actively become sponsors, advocates and mentors to those in the early stages of their careers and beyond.

I was inspired by his story and encouraged by his message of collegiality.

I invite members to write to us and share their experiences and also to continue the conversation in the Members Connect forum. ■

The Rise and Fall of Dunn Nutrition in Cambridge

Professor Roger G Whitehead, Director 1973-1998

The Medical Research Council's Dunn Nutrition Laboratory existed in Cambridge for over 60 years until 1998 becoming one of the world's foremost establishments dedicated to nutritional research. It started life almost by chance. William Dunn MP, a businessman turned politician, died leaving no living heirs. After the proceeds of his estate had been distributed to various religious and academic institutions, a small amount was left over. This provided the seed-money for establishing a vitamin research laboratory in Cambridge, although in a somewhat academically remote building originally used for anthrax research on Milton Road. As its prestige grew, international visitors to the Dunn frequently expressed surprise at this isolation. It eventually became my responsibility, indeed right up to my retirement, to try and rehouse the MRC's premier nutritional Unit on a more rational clinical academic site.

The heyday of nutritional research in the first part of the 20th century was the identification of essential vitamins and the elucidation of their mode of action. In this, the Dunn played a key role culminating in Egon Kodicek's team discovering the link between adequate exposure to sunlight, the skin synthesis of vitamin D and the way this functioned physiologically via 25:hydroxy-vitamin D and 1:25 dihydroxy-vitamin D.

It was around the time of this major vitamin research break-through that the scientific breadth of the Dunn's research started to broaden by the transfer of Elsie Widdowson's nutritional research team from the MRC funded Department of

Experimental Medicine on the retirement of Professor Robert McCance. The scientific strength of this new arrival was whole-body physiology rather than intermediary metabolism. Additionally, they had a long tradition of more applied investigations dating from strategic health planning issues such as UK food rationing during the Second World War and, after 1945, on famine in previously occupied Europe. There were also links with malnutrition in the developing world through research in Uganda. Initially, it has to be admitted there were difficulties, but gradually the differing philosophies came together thus paving the way for new developments that were to affect the MRC's overall approach to nutritional research.

It is difficult now to appreciate that, by the early 1970s, there was a significant body of medical science opinion that believed, since all the essential vitamins had been identified and their mode of action more or less established, there was little need for specialised nutritional research establishments in the UK. It was only in the developing world, they reasoned, that real problems of primary malnutrition existed and public health and clinical problems had to be solved. Fortunately, a research policy subcommittee under the chairmanship of Professor Neuberger, an enlightened biochemist, was able to dispel this concept. In a report produced by this committee it was emphasised that, in a society of rapidly changing national affluence, there were new dietary related patho-physiological consequences adversely affecting overall health and well-being. Effectively, it was this Report that projected the Dunn into new and

even more broadly based fields of nutritional health research.

Although I had been a corresponding member of the Neuberger committee, I did not expect to be much involved in any practical application of these recommendations. I was more than content working on kwashiorkor and marasmus in Uganda. Indeed, on being questioned by the MRC I twice declared I did not wish to be considered for the directorship of the Dunn in Cambridge. Adverse political events in Uganda, however, meant I was ordered to close the research down and return with my team to the UK and Cambridge on the understanding my research into the different forms of protein-energy malnutrition and their prevention would continue to be funded, if not in Uganda, in The Gambia. Luckily one of my experienced senior medical colleagues, Dr Mike Rowland, was prepared to take up the on-the-spot leadership of this research aspect.

Remodelling the Dunn to take into account the sort of priorities recommended in the Neuberger report inevitably meant changes. A key factor was that if the future research was to be driven by public health and clinical issues this could only be achieved if medically qualified investigators could be persuaded to join an establishment which had previously been noted primarily for its biochemical research. A problem at that time was there was no easy way for doctors to have human nutrition as a registered speciality. They feared being looked upon by the rest of their profession as 'having dropped out of medicine'. Eventually talented young

doctors did join, subsequently going on to establish important independent medical research careers.

The ever-growing national and international recognition of the need for more practical nutritional guidance in the optimisation of health and the prevention of disease also led to a much closer link between the Dunn and relevant governmental bodies. In the UK, this included the Department of Health (DH) and the Ministry of Agriculture Fisheries and Food (MAFF) while, internationally, the World Health Organisation (WHO) and the Food and Agriculture Organisation (FAO) were key. There was also a growing appreciation that a general improvement in dietary health would be impossible without the collaboration of food industries. The Dunn was urged to enable and support this too. Consequently, the Dunn evolved differently from most other MRC research units. Research excellence was always the primary criterion, second rate science does nobody any good, but the Dunn was also forced into becoming recognised as a national and international resource for nutritional guidance.

It is historically interesting to review the wide range of nutritional research topics the Dunn was covering at the time it was closed down in 1998. One key scientific area was on the importance of different dietary carbohydrates, especially those popularly known as 'dietary fibre', to gastrointestinal function and general health led by Professor John Cummings. Associated epidemically orientated studies by Professor Sheila Bingham investigated the link between diet and large bowel and other cancers.

Obesity and metabolic, behavioural, environmental and genetic effects on energy balance were all components of Professor Andrew Prentice's research. These clinical and public health orientated studies were facilitated by a temporary building erected on the Addenbrookes hospital site. Dr Ann Prentice lead research into the effect of diet and exercise on bone disorders especially osteoporosis. Reflecting their global importance, collaborative studies were carried out in Northern China and Africa as well as Cambridge. At a clinical care level, Professor Marinos Elia developed improved, metabolically based treatment procedures for the enteral and parenteral treatment of patients especially those living at home. Professor Alan Lucas investigated the complex dietary needs, and designed improved treatment methods for babies born very prematurely or small-for-date. Professor Tim Cole, as well as greatly improving nutritional statistical methodologies in general, developed a system for producing more scientifically accurate growth reference charts for the assessment of infant and child growth and well-being. In Gambia, a progression of investigators carried out both pure and applied research designed to alleviate public health needs like the development of locally producible food supplements to optimise foetal development and breast feeding adequacy as well as a whole range of more fundamental studies into subjects such as physiological and metabolic adaptations to marginal dietary energy intakes in pregnant and lactating mothers.

Likewise, in the UK, the Dunn needed to strike a rational balance between involvement in basic nutritional

science and answering public health questions. It was within this context that Dr Chris Bates and Dr Ann Prentice also became involved in the establishment of highly specialised micronutrient analytical facilities for the DH and MAFF National Diet and Nutrition Survey (NDNS). Innovative pieces of pure research led to Dr Andy Coward's stable isotope methodologies for the accurate quantitative measurements of key physiological functions like daily energy expenditure in free-living people with widely differing activity backgrounds and also the breast milk intake of young babies, especially those who were mixed-fed.

The growing public health importance of nutritional science in the 1990s made it increasingly obvious that the MRC's prime nutritional Unit should be rehoused within the growing mega-centre for bio-medical research on the Addenbrookes hospital campus. That, at the last minute, this did not happen – despite the advanced nature of the planning – is common knowledge. After 20 years does this still matter in terms of the international prestige of the UK's nutritional science? Could a case be made for a new similar institute? I think it does matter and that there is such a case. The multidisciplinary body of doctors and scientists working together at the Dunn created not only the appropriate environment for relevant pure and applied nutritional health research but also an excellent doctoral and post-doctoral training ground for many of the current cohort of senior nutritional scientists. ■

Student Section update

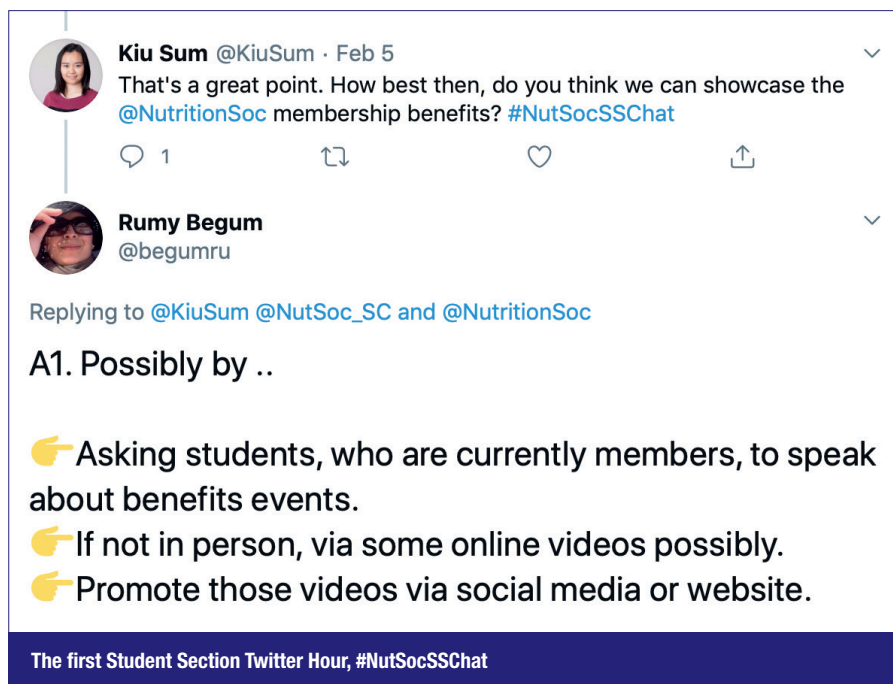
Kiu Sum, Chair of Student Section

I was honoured to be appointed as the Chair of the Student Section at The Nutrition Society in September 2019. My sincere thanks to Nadege Pouandeu (past chair), especially her work on developing the new Section (previously Student Body) whilst continuously expanding the student membership. I wish Nadege all the very best in the final year of her PhD.

It is an exciting time to be chairing the Student Section as we have just seen the student membership exceed 1000! Since taking on this role, I have spent a lot of time thinking about how best to engage and encourage student members to be more involved with the Society and the wider nutrition community. The question “how can we increase student engagement?” is at the forefront of my mind, and is a strong passion of mine. As a student, this was a constant challenge. I hope through my role with the Section and through the wider student community we can start gaining insights and enhance our student experience together.

As I aim to ensure students are included across all Society’s activities where possible, the Section has established strategies to enhance engagement and drive the development of our activities with an ambition to:

1. Increase the awareness about the Society in general,
2. Connect with Student Ambassadors and Student Members via a ‘two-way communication channel’,
3. Be more transparent and inclusive of the work of the Student Section and Society,
4. Increase visibility and communications to student members via social media and our regular quarterly newsletter,
5. Increase awareness of student opportunities from within the Society.



Kiu Sum @KiuSum · Feb 5
That's a great point. How best then, do you think we can showcase the @NutritionSoc membership benefits? #NutSocSSChat

Romy Begum @begumru
Replying to @KiuSum @NutSoc_SC and @NutritionSoc

A1. Possibly by ..

- 👉 Asking students, who are currently members, to speak about benefits events.
- 👉 If not in person, via some online videos possibly.
- 👉 Promote those videos via social media or website.

The first Student Section Twitter Hour, #NutSocSSChat

For those following our activities, we held a Twitter Hour (@NutSoc_SC) in February, interacting with members and non-members to highlight membership benefits. In April, we were excited to publish our very first Student Newsletter, sharing our activities and involving the wider student membership, and hosting our inaugural Journal Club. Aside from these, Nutrition Futures is our highlight of the year. Whilst we are currently in an unprecedented time, we are committed to delivering the exciting virtual Nutrition Futures Live conference facilitating undergraduates to postgraduates (including PhDs) to develop essential skills for their career and gaining knowledge across a range of disciplines

in nutritional science research. No matter what happens ahead, we look forward to welcoming you to this exciting online event and to interacting with everyone during the virtual networking opportunities.

I hope that you will continue to support us as we look to create more of an active student community. These activities proved the need for regular student interactions; membership benefits are not a one-off, but rather opportunities for long term personal and professional development. I look forward to working with many of you throughout my role and hope to see you at the next Society activity. ■

Find out more: www.nutritionociety.org/events/nutrition-futures-live-2020

Update from the Irish Section

Dr Anne Nugent, Secretary, Irish Section

With so many conferences and events affected by COVID-19, the Irish Section of the Nutrition Society were extremely fortunate that the Irish Postgraduate Conference was unaffected in February 2020. Hosted by University College Dublin, and attended by over 70 postgraduate and early career nutritionists, it was an extremely successful event with a good mixture of scientific and career development talks. A common remark from attendees was the high quality of the scientific talks. Members present appreciated Professor Julie Lovegrove's attendance at the meeting as President of the Nutrition Society and her presentation on the 'Academy of Nutrition Sciences', a new initiative which aims to advance the knowledge and application of evidence-based nutrition science. I would like to thank the local organisers Elaine Hillesheim, Sophie Govzman, Aislinn McCourt, Elena de Marco Castro and Laura Kirwan, supported by Prof. Clare Corish and Dr. Sharleen O'Reilly, for all of their work ensuring the event was a success.

Due to COVID-19, the 2020 Irish Section conference, due to be hosted at the University of Limerick by Dr. Eibhlis O'Connor, has been postponed until 2021. In June 2021, the University of Limerick will now host a combined event incorporating the

Irish Postgraduate conference and the Irish Section conference. Further details of this new initiative will be available in due course. I would like to thank the team at the University of Limerick for their flexibility and continued support.

Finally, we held a virtual Annual Section Meeting on the 18 June. Thank you to the members who attended. I would also like to highlight some of the recent changes to committee membership: Professor Clare Corish (Ordinary Member and former Chair) and Orlagh Feehan (Student Representative) have both stepped down from their roles. On behalf of the Irish Section, I would like to thank them both for all of their work and dedication to the section in previous years. The Committee would like to welcome the following members: Dr. Marianne Walsh and Dr. Emma Feeney as Ordinary Members and Lauren Devine as Student Representative. I look forward to working with you all over the coming years and express my sincere thanks to all the members of the Irish Section committee for their hard work over the past year. ■

We are always looking to engage with our membership: if you are keen to join the committee or you have ideas for future symposia topics get in touch at office@nutritionssociety.org



Local organisers of the 2020 postgraduate conference (L-R): Elaine Hillesheim, Sophie Govzman, Aislinn McCourt, Elena de Marco Castro and Laura Kirwan

Cellular and Molecular Nutrition

Dr Ruan Elliott, Theme Lead

The COVID-19 pandemic is causing immense disruption, misery and tragedy across the world. In the struggle to beat this virus, at least some glimmers of hope come from the truly amazing scientific progress made in only a few months. The SARS-CoV-2 virus was isolated, and its genome sequenced within weeks of the COVID-19 infection first being recognised. This enabled PCR-based infection screening to be established, facilitated the rapid development of highly sensitive and specific serological assays and provided vital information for the immense ongoing efforts to develop effective vaccines.

Our understanding of the molecular basis by which the virus infects cells and causes the symptoms of COVID-19 is advancing at incredible speed. This, in turn, provides the basis for the identification of potential therapeutic strategies currently under evaluation in multiple ongoing trials, many using the platform study format to make them more agile by enabling the dynamic addition and closure of intervention arms.

Current COVID-19 research brings together a vast range of scientific specialisms, enabling us to develop a broad perspective of not only how the virus spreads and affects our physical health but also how the pandemic is impacting upon our mental health, our society and collective wellbeing. Nutrition is emerging as an important factor that spans the entire spectrum.

It is becoming clear that suboptimal nutrition is important in relation to COVID-19 disease aetiology and severity. Consistent observations from cross-sectional studies highlight striking associations between obesity, and nutritionally modulated non-communicable diseases such as cardiovascular disease and diabetes with COVID-19 mortality. There is also growing interest in the potential roles for micronutrients such as vitamins A, C, D, E and selenium, iron, zinc and copper and non-nutrient plant bioactive components in mitigating infection and/or severity of COVID-19.

Much of the evidence points towards systemic inflammation and immune function support as the likely key risk-

modulators influenced by nutritional parameters. However, the work published to date is based almost entirely on preliminary epidemiological observations and provisional mechanistic hypotheses. I would argue that extensive mechanistic research, to elucidate exactly how nutrition affects inflammation and modulates the immune system will be key to making definitive links with infection and disease outcomes. With the growing global population and climate change, emerging zoonoses are predicted to pose a continued threat.

Thus, success in such research would have benefits far beyond the current pandemic and, indeed, probably far beyond infectious diseases. This is a huge scientific challenge, but it is also surely an important opportunity. The current crisis serves to emphasize just how rapidly major scientific advances can be made through concerted innovative cross-disciplinary research. I am convinced that we, the nutrition research community, can not only learn a great deal from the current COVID-19 research but also make important contributions in helping to reduce suffering from the current and future pandemics. ■

OBITUARIES

Professor John W. T. Dickerson

The Society is deeply saddened to announce the passing of John W. T. Dickerson, who died on 14 April 2020. He was an Honorary Fellow of the Nutrition Society, Emeritus Professor of Human Nutrition at the University of Surrey, and served as a scientific governor of the British Nutrition Foundation for many years.

Professor HH Vorster (1943–2020)

The Society was deeply saddened to learn of the passing of Professor Hester Vorster, former Director of the Centre of Excellence for Nutrition in the Faculty of Health Sciences of the North-West University (NWU), Potchefstroom, South Africa. The Society is particularly grateful to Professor Vorster for her work as Editor on all three editions of the Introduction to Human Nutrition textbook.

Personal perspective from the London Fire Brigade's Nutritionist

Greg Lessons



Seventeen years of public service as a firefighter alerted me to a culture of overnutrition at fire stations. Recent research has placed firefighters at elevated risk of acute myocardial infarction caused by exposure to excessive heat whilst fighting fires. It, therefore, became obvious to me that the modifiable risk factors of being overweight and obese needed to be addressed.

I returned to academia in 2015 to study for an MSc in human nutrition. This included specialist modules in public health nutrition and sports nutrition. It was a perfect blend of subject areas to prepare me for my future role, as firefighters have some similar nutritional demands to athletes due to having to be prepared to execute physically demanding tasks under extreme pressure in adverse conditions. As such, they can be considered as “industrial athletes” – and I approach firefighter nutrition with this in mind. Being an associate lecturer in sports nutrition helps with this.

My 2017 MSc dissertation involved a face-to-face dietary and lifestyle education programme alongside the environmental modification of an obesogenic food environment. The pilot trial significantly lowered BMI, body fat percentage, total energy intake, and several other key dietary variables for the intervention group firefighters, and 20% crossed over to safer waist circumference risk classifications.

The intervention was well received by all participants. Firefighters were thanking me for putting them on a healthier path, expressing how much better they were feeling. My study was the first in the UK to deliver a worksite nutrition-based intervention for firefighters to improve health and reduce obesity.

In April 2018 after several months of campaigning for an expansion of my intervention programme, I was detached from my professional duties as a

firefighter to work as the first ever full-time nutritionist in any fire brigade. This was uncharted territory for a somewhat antiquated institution, and as such added to the trepidation which I soon realised would have to be faced on a daily basis.

Armed with a stadiometer, body composition analyser and anthropometric tape measure I boldly ventured to fire stations anew to engage with watches whom I had never met. I was relieved to find that the vast majority of personnel welcomed this programme thus showing a demand for evidence based nutritional information in the midst of an area of science so fraught with confusion.

A seven-month extension of the intervention pilot trial yielded similar results over a larger sample of approximately 300 firefighters. The decision was then made to enhance the London Fire Brigade (LFB) nutrition programme via a PhD. This ongoing work is building upon my preceding MSc work via the development and integration of innovative tools for the specific assessment of firefighter nutritional status.

The research also involves pioneering dietary intervention components, such as fire station kitchen-based cookery workshops for groups of mess-managers (firefighters who purchase and cook for their watch/team). This involves me demonstrating practical methods of putting nutrition theory into practice and is being well received by mess-managers and their watches who are benefiting from the healthier meals served on duty.

The main part of my role currently entails visiting various fire stations and delivering a developed version of the intervention. This involves group-based nutrition education, dietary assessment, body composition analysis and individual nutrition consultations for firefighters. This enables the delivery of a personalised nutrition approach.

I am constantly dispelling common nutrition misconceptions and changing perspectives toward diet which is all very rewarding and fulfilling. Overall, the intervention programme is being very well received by staff of all levels.

Additional work includes holding seminars, clinics and developing educational materials for various departments within the brigade. This includes:

- Nutrition consultation drop-in clinics for women firefighters,
- Interventions to help the more sedentary areas of the workforce, for example the emergency call centre operators and admin teams,
- Seminars and lectures for fire safety inspection officers,
- Educational literature creation for the LFB Menopause Action Group,
- Nutrition educational content development for the LFB health and wellbeing intranet portal, and
- Regularly answering nutrition questions from LFB staff via email.

Beyond all this, I recently created and delivered a lecture at brigade headquarters on nutrition and mental health. Dealing with the situations that firefighters face can have a huge impact on mental health, so I consider this to be a particularly important piece of work.

In conclusion, I'd argue that my unique combination of experience as a firefighter, mess-manager, and expertise in nutrition creates important rapport with firefighters, enabling effective communication, gaining their trust as I know intimately the stressors and demands that are placed upon them and the complex relationship this has with nutrition. These are some of the factors that have facilitated the success of the programme. My work within LFB has recently received recognition from the Caroline Walker Trust, which awarded me 'Nutritionist of the Year 2019'. ■



Winter Conference

Save the Date: 8-9 December 2020

Micronutrient malnutrition, the deficiency of vitamins and minerals, is an issue across the whole life course, even in high income countries. Micronutrient malnutrition often accompanies low intakes of both protein and energy and leads to serious developmental issues in children, affecting cognition, physical function, and growth. At the other end of the life course, in older adults, recent research shows micronutrient malnutrition leads to decline in physical function, loss of muscle and cognition, and poor quality of life therefore, contributing to the

The Winter Conference 2020 will be held at the Royal Society, London, and will focus on Micronutrient malnutrition across the life course, sarcopenia and frailty.

diseases of aging, including sarcopenia and frailty. Micronutrients also help to maintain immune resilience, likely conferring protection against infections like influenza and COVID-19. A number of clinical conditions including bariatric surgery and gastrointestinal diseases also lead to micronutrient malnutrition. This meeting will highlight recent scientific

developments, current understanding and debate surrounding micronutrient deficiency and requirements across the life-course.

Further details are available on the conference section of the website. Registration and abstract submission will open shortly. ■



Events Calendar

Nutrition Futures Live

Online event
8-9 September 2020

Nutrition Society Awards Event

London, UK
7 December 2020

Winter Conference

London, UK
8-9 December 2020

3rd International Symposium on Nutrition

Lille, France
14-15 January 2021

Plus: regular webinars through the Nutrition Society Training Academy:

www.nutritionandsociety.org/training-academy



All registration fees and early bird deadlines can be found at: www.nutritionandsociety.org/conferences/our-conferences