Food in Medicine
Brighton
7 November 2018
Welcome to our first event run jointly by ERiMNN (Education and Research in Medical Nutrition Network) and Nutritank@BSMS.

We are delighted to host leading nutrition researchers, multi-professional clinicians and students for a fun evening to eat, discuss and learn more about the role of food in Medicine.

Nutrition related risk factors are a leading cause of premature death and disability, much of which could be preventable. Despite robust and growing evidence, the role of food in maintaining health and disease management is often overlooked within medical practice and medical education.

We hope to inspire more conversations around the role of food in medicine and will also be officially Launching Nutritank@BSMS and present work from ERiMNN with lots of ideas on how you can get involved.

6pm Registration

6.15pm Welcome and opening with Dr Kathy Martyn and Elaine Macaninch.

6.25pm Nutrition at BSMS with Prof Gordon Ferns

6.35pm 'An Apple A Day' with Amaran Cumarasamy

6.50 Peas please with Brighton Public Health Team

7.10pm Nutritank launch with Ally Jaffee and Philippa Wright

7.20-8 Break and food

8 Mindful eating research with Dr Ifigeneia Giannopoulou

8.15 Food in the community with Vic Borrill from Brighton and Hove food partnership

8.30 Culinary Medicine with Dr Rupy Aujla from the Doctors Kitchen.

8.50 Sum up

Close at 9pm.
Supporting Organisations

ERiMNN (The education and research in medical nutrition network) was co-founded by Dr Kathy Martyn and Elaine Macaninch to link Brighton and Sussex Medical school with educators, students, researchers and clinicians with an interest in nutrition in medicine. The aim is to encourage collaboration across different professions and community projects to increase capacity for local nutrition education and research. In addition, ERiMNN seeks opportunity to join forces with UK and global organisations such as NNedPro, Nutritank and Culinary Medicine UK to share ideas and contacts to widen the conversation around food within medicine and healthcare.

Nutritank, founded by Ally Jaffee and Iain Broadley is an information and innovation hub for food, nutrition and lifestyle. Empowering young people and communities to make a change. Their current focus is education. Through their Nutritank university society branches “Nutritanksocs”, they aim to promote the need for greater nutrition and lifestyle medicine training within medical education. Originating at Bristol Medical School, Nutritank has achieved a growing momentum across the UK, from the development of these Nutritank society branches at over 15 medical schools, to online and social media engagement and the curation of key projects on a local and national scale.
Supporting Organisations

NNEdPro are an award-winning, interdisciplinary think-tank, training academy, knowledge network and research consortium anchored in Cambridge which provides a centre for global excellence, whilst working without borders.

Our principal hubs are in Cambridge, London, Ulster and Parma. Our international networks, including regional hubs, extend from the Americas, through Africa and South Asia to Australasia.

We work through the members of our 'virtual core' and 'specialised networks' as well as via strategic partnerships and key collaborations. We also offer individual or institutional membership of our academy by application or invitation.

Our aim is to improve nutrition-related health outcomes by training professionals, strengthening research, implementing solutions and addressing inequalities, in line with the United Nations' Sustainable Development Goals and Decade of Action on Nutrition 2016-2025.

We have key affiliations with academic institutions, including the University of Cambridge, through which we deliver flagship educational courses and actively undertake collaborative research, particularly via senior academic appointments held by our leadership. Our group holds associate membership of Cambridge University Health Partners. We are also closely allied with specialist organisations, such as Global Open Data for Agriculture and Nutrition as well as the British Dietetic Association, which provides access to Dietetic expertise, as well as overall business support and governance oversight to our finance/operations.

In 2018, along with the British Medical Journal (BMJ) Group, NNEdPro became co-founders of BMJ Nutrition, Prevention and Health.

http://www.nnedpro.org.uk/home/4592183584
Supporting Organisations

Culinary Medicine

http://www.culinarymedicineuk.org/

Teaching Health professionals the foundations of nutrition and how to cook

Using the kitchen as the classroom, Culinary Medicine teaches the foundations of nutrition and cooking skills with an aim to inspire and empower health professionals to increase conversations around food, nutrition and behaviour change.

Modules are run by the Chef, Doctor and a registered Dietitian/ Nutritionist. Modules are accredited by the Royal College of General Practitioners and each is worth 6 CPD points with a diploma of Culinary Medicine awarded after the successful completion of relevant modules.

Brighton & Hove Food Partnership

https://bhfood.org.uk/

The Brighton & Hove Food Partnership is all about food

We’re a non-profit organisation helping people learn to cook, eat a healthy diet, grow their own food and waste less food.

We aim to connect and inspire individuals, community groups and organisations. We believe food is more than just fuel, it brings people together and changes lives.
Dr Katharine (Kathy) Martyn has worked with BSMS for 10 years and in Nutrition related teaching and research of nearly twenty years. A firm believer in the importance of improving food access and nutrition in the population her particular interests are related to nutrition education, the nutritional assessment and support of older people, people who have mental health difficulties and disadvantaged populations more generally. In 2012 Kathy worked with the ICGN in the development of the nutrition curriculum for undergraduate medical students and this led to a review of the Food and nutrition related content at BSMS. Following this review she identified and secured the funding for a Research and Education Dietitian with a joint appointment with BSMS and Brighton and Sussex University Hospitals. This post was announced at the NNEdPro Summer School in 2015 and Elaine Macininch was the successful applicant.

Since then Kathy has continued to collaborate with NNEdPro and co-founded, with Elaine, the Education and Research in Medical Nutrition Network (ERiMNN) to bring together like-minded people engaged in Nutrition Education within medical schools in the South East. ERiMNN is collaborating closely with NNEdPro to address National and International concerns related to Nutrition Education in Medicine and health professionals more generally.

Kathy was awarded a Lottery Fund Grant to deliver a sustainable cooking and healthy eating project into rural primary schools, the Kids Kitchen. Kathy has researched and presented at many conferences, both in the UK and nationally, on a range of topics related to both Nutrition and supporting disadvantaged populations.
Elaine currently works for Brighton and Sussex Medical School as a Nutrition Medical Educator helping to integrate nutrition into the curriculum. She maintains a clinical role as a Registered Dietitian, specialising in diabetes in pregnancy and is also the nutrition lead for Culinary Medicine UK.

In addition she is the Allied Health Professional lead for NNedPro Global Centre for Nutrition, which is an international nutrition research and education network with the aim of improving nutrition education across the globe.

She has a distinction PGCE in Medical Education and is a member of the Academy of Medical Educators (MAcadMed). She is currently studying for her MSc Med Ed, researching gaps in nutrition education from the perspective of medical students and junior doctors.

Elaine has a career spanning over 20 years, a BSc(hons) in Nutrition and Dietetics and postgraduate qualifications in diabetes, research, critical appraisal, behaviour change and communication. She is passionate about the need for collaboration and communication across professions to scale up nutrition education, to help prevent and treat chronic disease and to advocate for better access to healthy affordable food for all.

Twitter @macaninch https://twitter.com/macaninch?lang=en-gb

Instagram @MedEdNutrition https://www.instagram.com/medednutrition/
Professor Gordon Ferns qualified in medicine from St Bartholomew’s Medical College, University of London. He trained in Chemical Pathology at St Bartholomew’s Hospital, London, where he also undertook the research for his MD in lipid metabolism, funded by a Wellcome Pathology Research Fellowship and Aylwen Research Bursary. He was a British Heart Foundation-American Heart Association Reciprocal Fellow in the Department of Pathology at the University of Washington, Seattle, US, returning to the UK as a Senior Scientist at the William Harvey Research Institute, London. He was appointed to a Chair in Metabolic & Molecular Medicine at the University of Surrey in 1996, where he was subsequently Dean of Medicine. Gordon has worked at BSMS since 2012 as Head of the Department of Medical Education, and Honorary Consultant in Metabolic Medicine. He has more than 500 publications, many related to nutrition and cardiovascular disease.
Amaran Cumarasamy Medical Student

Amaran is a co-founder of 'An Apple A Day', a community-based initiative that engages young people from under-served areas of Brighton in conversations and practical skills development in healthy lifestyles delivered by trainee health professionals.

Title of Presentation: 'Young People, Inequality and Healthy Lifestyles in the Local Community' by Amaran Cumarasamy - 'An Apple A Day'

This short talk describes food as a medium that connects communities and healthcare, in the context of young people, Brighton and its deprivation.

Phillippa Wright Medical Student and President of Nutritank@BSMS

I am a 4th year medical student at BSMS with a passion for improving the health of others through lifestyle medicine and nutrition. I have an intercalated BSc in Human Nutrition and Metabolism from King's College London and I am currently undergoing research on the food environment in RSCH and PRH. I am also on the Undergraduate Society of Lifestyle Medicine (ULMS) committee who are a student run society that work in partnership with the British Society of Lifestyle Medicine. I am very excited to be the Nutritank@BSMS lead this year. My aim is to, with the help of my committee, inspire and educate students on how lifestyle medicine and nutrition can drastically improve health.
Ally Jaffee Medical student and co-founder of Nutritank

Ally Jaffee is a Bristol medical student. She is currently doing an intercalated BSc in Humanities, Philosophy & Law at Imperial College London. She aspires to be a change-maker in the preventive medicine space. Alongside fellow student colleague, Iain Broadley, she co-founded Nutritank. Nutritank is an innovation and information hub for food, nutrition, lifestyle and sustainability. Currently, its primary aim is to implement greater nutrition and lifestyle medicine education within medical training. Nutritank has branches in nearly all medical schools nationally, as well as international networks. Nutritank is supported both in the media and within the healthcare space from NNEDPRO, College of Medicine and The Royal society of Medicine to Jamie Oliver.

Presentation:
Ally will talk give an overview of Nutritank. From Nutritank’s philosophy to their recent achievements and future work.

Vic Borill from Brighton and Hove Food Partnership

Vic has been the Director of the Food Partnership since 2008. BHFP is a non-profit organisation that helps people learn to cook, eat a healthy diet, grow their own food and waste less food. Over the last 10 years Vic has witnessed the positive impact community food work has both on people’s physical and mental health and is passionate about the role of food in health and wellbeing.

Food in the community with Vic Borill from Brighton and Hove Food Partnership
Vic will provide an outline of the evidence gathered on the impact of the Food Partnership’s community food work on the physical and mental health of vulnerable adults and will
Ifigenia (Fenia) joined the University of Brighton in 2010 as a Senior Lecturer in Sport and Exercise Science. Fenia comes from a diverse background of educational and research experiences, having studied and worked as an academic both in Europe and America. Fenia has a BSc in Exercise Science from the University of Athens, Greece; an MscEdu in Exercise Science from Northern Illinois University in America; and a PhD in Exercise Physiology/Science Education, from Syracuse University in New York State in America. She has previously been a Lecturer in Applied Physiology at Strathclyde University in Glasgow, and a Lecturer in Exercise Physiology/Sports Nutrition, at the University of Athens in Greece.

Fenia’s research interests lie in the area of clinical exercise physiology and nutrition. Her research is focused on the effects of exercise and diet on health and specifically on abdominal obesity and chronic low grade inflammation and on clinical populations such as obese individuals, type 2 diabetes patients and postmenopausal women.

More recently her research is focused on mental health, investigating the effects of lifestyle interventions through new innovative techniques such as mindfulness and mindful eating on mood, eating behavior, disordered eating and overall wellbeing in university students and mental illness patients.

Fenia has research publications in well-known research journals such as Metabolism, Journal of Endocrinology and Metabolism and Nutrition and has been presenting her work in national and international research conferences. She is an editorial member of the European Commission Horizon 2020 Grants and various nutrition and exercise peer-reviewed journals.

**Mindful Eating Talk** Fenia’s talk will focus on the effects of mindful eating on eating behavior and relationship with food. She will introduce the concept of mindful eating with some practical interactive exercises with the audience and will present the basic components of a mindful eating practice. By the end of her talk Fenia aims to enable the audience to gain a first awareness of how they eat and identify any triggers of overeating, undereating or emotional eating.

Please provide an introduction to the Food Partnership’s latest venture the Community Kitchen.

**Please follow this link to participate in a survey on mindful eating and mood and eating behaviour in health professionals**

[https://brighton.onlinesurveys.ac.uk/mindfulness-and-eating-behaviour-in-health-professionals](https://brighton.onlinesurveys.ac.uk/mindfulness-and-eating-behaviour-in-health-professionals)
Dr Katie Cumming, Public Health Consultant

Katie Cuming has been a public health consultant at Brighton and Hove City Council since 2015, where she is the lead consultant for healthy lifestyles, working on food, obesity, physical activity, workplace wellbeing and more. Recent local partnership work includes Sugar Smart Brighton and Hove.

She has had a long term interest in nutrition, as a junior doctor alternating work in the NHS with humanitarian relief work in sub Saharan Africa and Afghanistan for a number of years, working on the treatment of acute malnutrition in hospital, feeding centre and community settings. Having previously trained and worked as a GP, she trained in public health spending time working on infant feeding, obesity, neglected tropical diseases and vaccination with placements at the Institute of Development Studies and DFID.
Dr Rupy Aujla from the doctors Kitchen and Culinary Medicine

Dr Rupy Aujla is the NHS GP who started 'The Doctor's Kitchen'. A project to inspire patients about the beauty of food and the medicinal effects of eating well.

Not only does he create delicious recipes on his website and social medial channels including Instagram, Facebook and YouTube - but Dr Aujla also talks about the amazing clinical research behind the ingredients he uses. He also has a best-selling cook book - 'The Doctor’s Kitchen' - published by Harper Collins.

In his role as clinical adviser to the Royal College of GP’s and more recently being accepted as a fellow on the NHS Clinical Entrepreneur Programme – Dr Aujla has big aspirations to bring the concept of 'Culinary Medicine' to the profession globally.

He is also the founder of ‘Culinary Medicine’ – a non-profit organisation which aims to teach doctors and medical students the foundations of nutrition as well as teaching them how to cook.

"As a doctor, I see the effects of poor dietary and lifestyle choices every day. I got so many questions about nutrition whilst working as a general practitioner that I plucked up the courage to get behind a camera and literally show my patients how to get phenomenal ingredients onto their plate. I’m just a straight talking doctor giving healthy eating inspiration"

Socials
Website: www.thedoctorskitchen.com

Book: https://www.amazon.co.uk/Doctors-Kitchen-Supercharge-delicious-everyday/dp/0008239339

Facebook: https://www.facebook.com/thedoctorskitchen/

Instagram: https://www.instagram.com/doctors_kitchen/?hl=en

Twitter: https://twitter.com/doctors_kitchen?lang=en

YouTube: https://www.youtube.com/channel/UCDHTLhQbYIFnPBv-iLgFsQQ
BSMS Nutrition Research Research
Posters

Please see the foyer for BSMS staff and student led nutrition research.

We have presented at Diabetes UK, NNedPro Global nutrition summit and at the Royal College of GPs.
Anthropometric deficits in infants under 6-months of age in Malawi: a descriptive secondary data-analysis of a cross-sectional prevalence survey
Gluning I MSc ANutr, Kerac M BSc MBBS DTM&H MRCPCH MPH MFPH PhD RNutr
1 Brighton and Sussex Medical School
2 London School of Hygiene and Tropical Medicine

Abstract
Introduction: In infants under-6-months (<6m) undernutrition is associated with increased morbidity and mortality, though is often over-looked. Anthropometry, to identify nutritionally vulnerable infants <6m, is an area warranting immediate research. This secondary data-analysis aims to describe the epidemiology of different anthropometric deficits in infants <6m, with a view to identifying and defining at-risk infants in need of further intervention.

Methods: Data was analysed from a cross-sectional prevalence survey conducted from September (2013) to January (2014) in Malawi, where information was obtained on infant age, weight, length, mid-upper arm circumference (MUAC), birthweight and breastfeeding problems. Our secondary data-analysis used STATA ver.12 to calculate four anthropometric indicators according to WHO 2006 Growth Standards: weight-for-length z-score (WLZ), weight-for-age z-score (WAZ), length-for-age z-score (LAZ), and MUAC. Anthropometric deficits were compared using Scatter-Plots and Venn-Diagrams.

Results: A total of 6,788 infants were identified, of which 6,012 were included in final analyses. In November (2013) prevalence of WLZ<-3 was 1.2%, MUAC<115mm was 11.7%, MUAC<110mm was 7.3%, WAZ<-3 was 3.8% and LAZ<-3 was 8.1%. Mean MUAC varies with age, identifying large proportions of infants as nutritional vulnerable in the first two months of life. Most infants with a WLZ<-3 were identified using both MUAC<110mm and WAZ<-3. Conversely, only a small proportion of infants with a MUAC<110mm were identified by WLZ<-3.

Conclusion: WLZ alone misses large proportions of infants with deficits in MUAC and WAZ. Associations between anthropometric deficits and mortality, as well as the causes of undernutrition in infants, warrants further research.
The management of Moderate Acute Malnutrition (MAM) in children aged 6-59 months in low- and middle- income countries: a systematic review and meta-analysis

Gluning I1, Rollins N2, Kerac M3, Opondo C3

1Brighton and Sussex Medical School
2World Health Organisation
3London School of Hygiene and Tropical Medicine

Abstract

Acute malnutrition is a leading cause of morbidity and mortality in children aged under five years, especially in low- and middle- income countries (LMICs). Although severe acute malnutrition (SAM) is considered a more serious and life-threatening condition, moderate acute malnutrition (MAM) affects a greater proportion of children globally and, unlike SAM, there are currently no WHO recommended guidelines for MAM management. This systematic review and meta-analysis assessed the effectiveness of lipid-based nutrient supplements (LNS), fortified-blended-flours (FBF) and nutrition counselling, in the treatment of MAM. Five databases were systematically searched for studies conducted in LMICs that compared the effectiveness of food-based products versus a comparator treatment group in promoting recovery from MAM in children aged 6-59 months. Where appropriate, combined outcome data were analysed using random-effects meta-analyses, and assessed for heterogeneity. A total of seven randomised-controlled trials were identified for inclusion. Evidence, all from African settings, suggested that children aged 6-59 months with MAM who are treated with a lipid-based nutrient supplement (LNS) have an increased probability of recovery compared to children treated with fortified blended flours (FBF) (RR 1.03, 95%CI 1.00-1.06, p=0.022). Treatment with an LNS was associated with a lower risk of persistent MAM at the end of treatment compared with a FBF (RR 0.82, 95%CI 0.71-0.95, p=0.007), and a lower risk of progressing to SAM compared to a FBF (RR 0.87, 95%CI 0.76-0.99, p=0.042). Supplementation with LNS products may improve recovery and prevent progression to SAM compared to supplementation with a FBF. Further research is needed to understand how LNS products should be deployed as part of international MAM management. This includes identifying which subgroups of children are at a greater risk of negative health outcomes, and who amongst those will respond appropriately to LNS treatment. Future research in areas with good food security should aim to include nutrition education alone as a MAM intervention.
NICE targeted screening for gestational diabetes (GDM); who are we missing?

Kucuk C, Macaninch E, Goulay C, Chakera A

1 Brighton and Sussex Medical School
2 Brighton and Sussex University Hospitals Trust

Aims or Objectives/Introduction
Our hospital’s diagnostic pathway for GDM has changed from universal screening (glucose challenge test (GCT) followed by OGTT) to NICE-recommended targeted screening. We investigated whether women that would be missed by targeted screening Protocol had adverse clinical outcomes.

Methods
We reviewed the electronic records of all women with GDM who delivered between April and October 2016, during a period of universal screening. We compared treatment and birth outcomes between those with NICE risk factors (RF) against and those with no risk factors (NoRF). We used Chi Squared tests to assess differences.

Results
92 women with GDM gave birth during the six months studied. 32 (35%) had no risk factors and would not currently be diagnosed with GDM.

There was a significant difference in treatment of NoRF compared to RF (p=0.003). More NoRF were managed on diet and exercise alone (53% vs 40%) and fewer NoRF required insulin therapy (19% vs 45%).

Delivery events were similar in each group (p=0.23).

Fewer NoRF had macrosomia (bw>4000g) (RF n=1 (3.1%) v NRF n=5 (8.3%)).

SCBU admission, predominantly for neonatal hypoglycaemia, was greater in NoRF (NRF n =7 (21.9%) v RF n =5 (8.3%)).

No still birth or shoulder dystocia in either group.

Conclusions
Targeted screening for Gestational Diabetes using NICE guidelines would have missed over a third of women with GDM. Though NoRF women required less pharmacological treatment, they had adverse maternal and fetal outcomes equivalent to those of women with RF. Our results support universal screening of GDM.
Group education for women with newly diagnosed gestational diabetes (GDM) improves patient experience and healthcare professional (HCP) time efficiency.

E Macaninch1, M Yusuf2, C Gourlay3, A Alder1, AJ Chakera2

1Nutrition and Dietetics, Brighton and Sussex University Hospitals Trust, Brighton, UK. 2Diabetes Department, Brighton and Sussex University Hospitals Trust, Brighton, UK. 3Maternity Department, Brighton and Sussex University Hospitals Trust, Brighton, UK.

Aims: In response to overburdened antenatal-diabetes clinics and delays in meeting the dietitian and midwife, we developed multi-disciplinary group education for all women with newly diagnosed GDM. This is an alternative to 1:1 appointments with the diabetes nurse, dietitian and midwife. We aim to see patients sooner, to use HCP time more efficiently and to improve patient experience. Following group education women continue to routinely attend multi-disciplinary antenatal clinic.

Methods: The interactive group education session includes facilitated discussion on treatment, monitoring, pregnancy and delivery options, to aid self-management. Post-group, women complete an anonymous evaluation form, including questions about the content, delivery, timing and utility of the group education, including their confidence to follow guidance. We also reviewed HCP time saved.

Results: Of 70 women who have attended, 60 questionnaires have been completed. All women were seen for group education within one week of diagnosis. Mean group size was 3.5 (Range 2–5). All women were either extremely likely (n=50) or likely (n=10) to recommend this session to friends or family. All women gave a positive response to all questions, with >90% choosing the most positive response available. Attendees cited the group setting, peer support and access to all HCPs as key benefits, helping to build confidence and reassurance. Group education reduced HCP time by half compared to seeing women individually (51.5mins v 112mins per woman).

Summary: Group education for gestational diabetes meets patient expectations, women are seen by HCPs more quickly and in a more time efficient way.
Does the General Medical Council nutritional competency framework adequately prepare junior doctors to deliver nutrition care?

Keep. H ¹, Martyn. K ², Ball. L ³, Macaninch. E ¹,⁴

¹ Brighton and Sussex Medical School,
² University of Brighton
³ Menzies Health Institute Queensland, Griffith University, Gold Coast, Australia
⁴ Brighton and Sussex University Hospitals NHS Trust

Background: Malnutrition increases the risk of non-communicable disease, reduces life expectancy and increases the economic burden of ill health in acute and preventative healthcare. However, there is currently very little mandated nutrition curricula in UK undergraduate medical education.

Methods: The validated NUTrition COMPetence questionnaire (NutComp) was completed by 143 junior doctors within the Brighton & Sussex University Hospitals (BSUH) National Health Service Trust. NutComp uses 5-point Likert scales over four nutrition constructs: knowledge, skills, communication and attitudes towards nutrition. A self-perceived competence score was calculated as a percentage for each construct. Associations between the four constructs, prior education and demographics were explored using Pearson’s Chi-Squared test for independence.

Results: The junior doctors perceived themselves as competent in nutrition care (competence score = 66%), but lacked confidence in nutrition knowledge (competence score = 53%). Greater confidence in nutrition knowledge was associated with greater confidence in nutrition skills ($\chi^2 = 11.04$, $P = 0.0001$). Participants who had completed additional nutrition education reported having greater confidence in both their nutrition knowledge ($\chi^2 = 8.49$, $P = 0.004$) and nutrition skills ($\chi^2 = 4.30$, $P = 0.04$) compared with participants who had not completed additional nutrition education. The nutrition content of undergraduate medical training was reported as ‘too little’ by 56% of participants.

Conclusions: Overall, BSUH junior doctors feel competent in nutrition care. However, junior doctors may benefit from greater confidence in their nutrition knowledge and additional undergraduate nutrition education. Further review of the General Medical Council nutritional competency framework is recommended.
A feasibility study to evaluate participant experience and perceived impact of a Culinary Medicine pilot course for doctors.

Bhansali, A. A.,1,2 Parker, K.,1,3 Macaninch, E.1,4,5

1 Culinary Medicine UK
2 Bedford Hospital NHS Trust
3 University College London
4 Brighton and Sussex University Hospital Trust
5 Brighton and Sussex Medical School

Background:
A growing body of evidence underpins dietary factors as a key determinant of chronic disease. Culinary medicine (CM) education aims to equip doctors with tools and knowledge to integrate nutrition into clinical practice.

Aim:
To establish whether CM meets learning expectations and can improve doctors’ self-perceived knowledge and confidence in addressing nutrition.

Method:
16 doctors registered for CM pilot modules. Utilizing a flipped classroom approach, participants completed pre-course, online learning materials and a questionnaire assessing self-perceived nutrition knowledge and self-efficacy. On the day, participants prepare goal-specific nutritious alternatives to traditional meals under the guidance of professional chefs and dietitians. Facilitated group discussions explore application to clinical cases. 12 participants completed a post-course questionnaire to evaluate perceived impact of attending.

Outcomes:
75% of 16 participants had no prior education in nutrition yet all agreed that diet is very important to health and hoped to gain a better understanding. 31% agreed that lack of knowledge is a crucial barrier to eating healthy. 50% reported confidence in their nutrition knowledge pre attendance, which increased to 75% (9 of 12) post attendance. 62.5% reported discussing nutrition regularly with their patients’ pre attendance while all 12 respondents were willing to regularly discuss nutrition post attendance, 92% were confident having these discussions and all 12 would register for further modules.

Discussion:
CM meets participant learning expectations for those responding. Participants perceive improvements in knowledge and confidence in addressing nutrition. Conclusions are limited by small sample size and warrants further investigation.
Challenges and Opportunities for the Integration of Nutrition in to the Undergraduate Medical Curriculum at Brighton and Sussex Medical School.

Macaninch. E \(^1,2\) and Martyn. K \(^2,3\)

\(^1\)Brighton and Sussex Medical School.
\(^2\)Brighton and Sussex University Hospitals NHS Trust.
\(^3\)University of Brighton.

**Background**

Nutrition outcomes are mandated by the General Medical Council (GMC). The intercollegiate Nutrition Group (IGCN) curriculum gives more guidance on content and integration. We discuss the challenges in translating IGCN guidelines into teaching practice.

**Methods**

The IGCN learning outcomes provides the framework for the continued review of the BSMS curriculum. Findings for 2017-18 are compared with the initial review undertaken in 2015-16. Utilising an action research framework, data from student and faculty feedback on teaching sessions and nutrition related research and activities provides opportunity for further development.

**Results**

Explicit nutrition content has increased from 1 module in 2015-16 to 8 modules in 2017-18. Medical students and multi professional involvement is key to identify opportunities for curriculum development. Medical students value nutrition education and see this as an important part of their role as future doctors. However they report the need for more nutrition within assessments and are not witnessing nutrition as a part of clinical care during medical placements.

**Future**

Nutrition development is limited by curriculum space and needs to be embedded into the current structure and to consider how this fits within clinical placements and qualified medical practice. Increased use of technology and e-learning may offer additional, more integrated nutrition content. Expanding the question bank and OSCE’s (objective simulated clinical examination) will improve summative and formative assessment.

**Summary**

Nutrition curriculum content has increased, is more visible and receives positive feedback. A collaborative and pragmatic approach offers opportunities for realistic, sustainable integration and future developments.
Many thanks to all of our speakers, Participants, to Neil Macaninch [www.neilmacphoto.co.uk](http://www.neilmacphoto.co.uk) for the photography and to Kathy Martyn [www.oakfield-farm.co.uk](http://www.oakfield-farm.co.uk) for the food.

A special thanks to [Brighton and Sussex Medical School](http://www.brighton-sussex-medical-school.ac.uk) for hosting and for all the support for Nutrition education.