NNEdPro Global Centre for Nutrition and Health

Advancing and implementing nutrition knowledge to improve health, wellbeing and society

STRATEGIC PLAN
(2021 – 2025)
THE NEED FOR NUTRITION EDUCATION/INNOVATION PROGRAMME GLOBAL CENTRE FOR NUTRITION & HEALTH

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(2021 – 2025)

NNEdPro Chair (Professor S Ray) &
The NNEdPro Board of Directors

ST JOHN’S INNOVATION CENTRE, Cambridge, UK
E: info@nnedpro.org.uk | W: www.nnedpro.org.uk
Executive Summary

‘Advancing and implementing nutrition knowledge to improve health, wellbeing and society’.

The NNEdPro Global Centre for Nutrition and Health is an award-winning interdisciplinary think-tank, building on over a decade of nutrition education, research and innovation. We convene central and regional networks across 6 continents as part of the International Knowledge Application Network in Nutrition-2025 (I-KANN-25). NNEdPro is aligned with the United Nations Sustainable Development Goals, the UN Decade of Action on Nutrition (2016-2025), and the UN Decade of Family Farming (2019-2028). We are committed to tackling the burden of malnutrition in all its forms – undernutrition, overnutrition and micronutrient deficiencies – through the effective use of education, research and advocacy, as well as developing in-depth and scalable change models for population level impact.

Mission:

To tackle the global crisis of malnutrition (in all its forms) by conducting research and delivering education in gap areas, empowering professionals, policymakers and the public; to facilitate sustainable improvements in nutrition and health behaviours, accelerating progress towards the United Nations 2030 goals.

Vision:

To establish the NNEdPro Global Centre for Nutrition and Health as a world leading, innovative think-tank, training academy, and knowledge network bringing together the best of education, research, evaluation and advocacy, particularly in nutrition-related aspects of health and healthcare systems.

Seven Core Values

Individuals in NNEdPro are: Collaborative, Passionate, Committed
As an organisation NNEdPro is: Collaborative, Evidence-informed, Impactful
NNEdPro processes are: Evidence-informed, Transparent, Democratic
To advocate for a focus on sustainability and climate change within food and nutrition related research and practice

‘Gold-standard’ nutrition education programmes driving the inclusion of nutrition in clinical education and practice

Minimise nutrition, social care and health inequities by empowering individuals and driving systemic change for underserved populations

Sustainable voluntary regional networks for nutrition knowledge exchange and advocacy across the globe

Facilitate funding and commissioning of nutrition related projects

Agile nutrition think-tank with high quality infrastructure for provision of consultancy services

Implementation of nutrition knowledge into policy, practice, and wider food and health systems, by providing leadership and advocacy

Advance nutrition research and produce evidence syntheses onto an associated publication platform

Apex body for interdisciplinary knowledge exchange

Nutrition Education for Healthcare Professionals

Empowering Underserved Communities in Nutrition and Health

Nutrition Science Communications for Health Impact
Strategic Aims

1. To become a globally recognised apex body for interdisciplinary data insights and knowledge exchange in nutrition, health, and closely related domains.

2. To continue to lead sustainable voluntary regional networks for nutrition knowledge exchange and advocacy across the globe, aligning to relevant national and international organisations.

3. To continue to deliver a range of ‘gold-standard’ nutrition education programmes that encourage capacity building across international and interdisciplinary networks, driving the inclusion of nutrition in clinical education and practice.

4. To advance high-priority and rigorously conducted nutrition research including human interventions, population studies, evidence syntheses and data science methodologies, as well as curating in an associated peer-reviewed publication platform.

5. To work towards minimising nutrition, social care and health inequities by creating models that empower individuals and drive systemic change for underserved populations.

6. To drive the implementation of nutrition knowledge into policy, practice, and wider food and health systems, by providing leadership, advocacy, as well as encouraging collaboration with like-minded individuals and organisations.

7. To function as an agile nutrition think-tank with high quality infrastructure for provision of consultancy services.

8. To facilitate the funding and commissioning of nutrition related projects in priority areas.

9. To advocate for a focus on sustainability and climate change within food and nutrition related research and practice.
Membership

At the level of individuals, we work through our membership by invitation including our central ‘Virtual Core’ as well as regional networks, whilst at an organisational level, we work via strategic partnerships and key collaborations.

We also offer individual membership of our academy by application and subscription.

Headquarters and Strategic Partners

Our corporate headquarters are at St John’s Innovation Centre in Cambridge, UK. Our principal hubs of academic activity involve multiple academic institutions and specialist organisations:

**Academic Institutions**

- **University of Cambridge**, England: Focus on nutrition and interdisciplinary/social sciences
- **Monash University**, Australia: Focus on nutrition education and consumer sciences
- **University of Parma**, Italy: Focus on food and basic sciences
- **Imperial College London**, England: Focus on nutrition and epidemiological/ population sciences
- **Ulster University**, Northern Ireland: Focus on nutrition and biomedical/health sciences
- **University of Wollongong**, Australia: Focus on medical nutrition education and clinical sciences

**Specialist Organisations**

- **British Dietetic Association (BDA)**: Since our inception in 2008, the BDA has provided access to subject expertise, business support and governance oversight to our virtual operations.
- **British Medical Journal (BMJ) group**: In our 10th anniversary year (2019) along with the BMJ, we became co-founders of BMJ Nutrition, Prevention and Health.
- **Laboratory of the Government Chemist (LGC)**: We work closely with the LGC on developing international knowledge networks and strengthening research.
- **Lord Rana Foundation Charitable Trust**: Our official charity partner, whom we partner with for our charitable work.
- **Society for Nutrition Education and Behavior (SNEB)**: We have worked with the SNEB for over a decade and have developed a joint membership/mentoring scheme.
- **Swiss Re Institute (SRI)**: This strategic partnership was developed to form our knowledge application models.
- **Education & Research in Medical Nutrition Network (ERimNN)**: We work closely with ERimNN as part of a Nutrition Implementation Coalition which incorporates Nutritank and Culinary Medicine UK in joint efforts to strengthen nutrition capacity.
The Way Forward: 2021-2025

1. To become a globally recognised apex body for interdisciplinary data insights and knowledge exchange in nutrition, health, and closely related domains

Our main work in this aim is the International Knowledge Application Network in Nutrition 2025 (I-KANN-25), the basis for this network-of-networks.

I-KANN-25 is an open access, online, easy to navigate portal for data collection, analysis, and knowledge sharing regarding nutrition research. It has a living repository of information and education resources that support and link to food, nutrition and health system stakeholders across the globe.

**Purpose:** To create a global network that will identify nutrition knowledge gaps and develop and deliver high impact technology-based nutrition education to healthcare providers, food, nutrition and health researchers, policy makers and the public within a sustainable model. This initiative strengthens and builds national nutrition systems necessary to realise Universal Health Coverage and healthy communities. I-KANN-25 will promulgate high quality and scalable nutrition knowledge translation aiming to achieve sustained impact in global food and health systems.

**Progress to Date:** I-KANN-25 was officially launched in 2018 as a joint initiative between NNEdPro and Global Open Data for Agriculture and Nutrition (GODAN), supported by the Laboratory of the Government Chemist (LGC).

**Future Plans:** We envisage that a live team will moderate discussions and curate data, respond to requests for education, training, information and guidance at a global and at regional levels. I-KANN-25 will be able to promote translatable information at a global level and drive implementation of knowledge into policy and practice, bridging the gap between Agricultural and Human Nutrition.

**Milestones:**
- To launch the I-KANN 25 website with access for people to become a member (free)
- To reach 100 members
- To have the first study registered
- To have a database housed online
- To convene regional networks with hubs across six continents.

**Alignment:** Implementation Research and Consulting in Nutrition (IRCN) and Nutritional Equity and Population Health (NEPH)
2. **To continue to lead sustainable voluntary regional networks for nutrition knowledge exchange and advocacy across the globe, aligning to relevant national and international organisations**

Within I-KANN-25, there are currently 10 regional networks, across 6 continents, that aim to support a defined need in that region that aligns with the mission and vision of NNEdPro and I-KANN-25.

**Purpose:** In each regional network under I-KANN-25, we intend to apply successful innovation and change models that align with the needs of the region. Two options include:

a) *Nutrition Education Policy for Health Practice (NEPHELP):* This model seeks to change the default status of nutrition education within health systems by strengthening the nutrition workforce in each region.

b) *Mobile Teaching Kitchens:* this model is a means of empowering underserved members of society to become culinary health educators. It brings together an intersectoral group of change drivers from medical and nutritional personnel to lay volunteers and NGOs all invested in reducing nutritional inequities for better population health.

**Progress to Date:** There are currently 10 regional networks that each have their own objectives aligning with the needs of their region and the aims of I-KANN-25. Current networks include: Australia & New Zealand; Brazil; China & South East Asia; India & South Asia; Italy & the Mediterranean; Mexico; Morocco & Africa; Switzerland; United Kingdom & Ireland; and the United States.

**Future Plans:** By the end of 2020, there will be 12 regional networks, including extended reach within key regions. After the 12th network is launched, focus will be on providing development support to each network. Networks are led by representatives of that region, facilitated by the NNEdPro Virtual Core and Global Innovation Panel. In supporting these networks, we encourage development of a strong foundation that will build a sustainable network that fosters collaboration.

**Milestones:**
- Launch of 12th network
- First publication produced by a regional network

**Alignment:** Implementation Research and Consulting in Nutrition (IRCN) and Nutritional Equity and Population Health (NEPH)
3. **To continue to deliver a range of ‘gold-standard’ nutrition education programmes that encourage capacity building across international networks, driving the inclusion of nutrition in clinical education and practice**

To foster global collaboration and capacity building, we host the annual Summer School in Applied Human Nutrition and the International Summit on Medical & Public Health Nutrition Education & Research. We also run the International Academy of Nutrition Educators (IANE), to which Summer School alumni become members for a fixed period.

IANE is a global membership network aiming to provide mentoring and opportunity for professionals and organisations interested in developing and delivering high quality nutrition education and evaluating its impact, particularly on healthcare practices. IANE is designed to support sustained collaboration and capacity building, working in collaboration with SNEB (United States) and Monash University (Australia). We also deliver medical nutrition education and research methods training to a variety of professionals, including medical students, general practitioners, and pharmacists in person and via online learning through our Nutrition Education and Training ePortal.

**Purpose:** To develop, deliver and evaluate evidence-based education and training in nutrition and health as well as promote the capacity building and training tomorrow’s trainers, particularly in nutrition and medical/healthcare education.

**Progress to Date:** Since the Summer School was launched in 2016, we have produced over 120 certified professionals. The Summer School is accredited by the Royal Society of Biology and the Royal College of Physicians for purposes of Continuing Professional Development. The 2019 & 2020 editions were co-organised with the School of Advanced Studies on Food and Nutrition of the University of Parma, Italy.

Since the Summit launch in 2015, we have reached over 300 individuals, encouraging interdisciplinary collaboration and taking a wide perspective on the integration of knowledge into policy and practice.

This work has been consistently recognised through numerous awards, including a joint prize from the Nutrition Society and British Association for Parenteral and Enteral Nutrition (2010), the Complete Nutrition Outstanding Achievement Award (2015), and the Medical Nutrition International Industry Award in conjunction with the European Society for Parenteral and Enteral Nutrition (2017).

**Future Plans:** Annual events will continue, and further emphasis will be placed on strengthening the IANE membership benefits including 1:1 mentoring sessions, topical webinars, online journal clubs appraising current research and assisting clinicians to incorporate nutrition into their care through provision of resources.

**Milestones:**
- Train 500 Summer School candidates, widen access, ongoing growth of IANE

**Alignment:** Nutrition Education, Training and Skills (NETS)
4. To advance high-priority and rigorously conducted nutrition research including human interventions, population studies, evidence syntheses and data science methodologies, as well as curating in an associated peer-reviewed publication platform

Within NNEdPro, the Nutrition Research and Innovation Consortium (NRIC) spans Universities in Ulster, Cambridge, Imperial College London, Parma, and Wollongong. With combined strengths from these centres of research excellence, NNEdPro conducts primary and secondary research to address unanswered questions around Nutrition and Disease Prevention, connecting the cutting edge of science to evidence-informed policy and professional practice.

Through BMJ Nutrition, Prevention & Health (BMJ NPH), an open access journal published in association with BMJ, NNEdPro presents robust research on the key determinants of health including the social, economic, and physical environment, as well as lifestyle and behaviour. It also explores nutrition and healthcare interventions and technologies which aim to maintain and improve health and wellbeing and to prevent illness and injury.

**Purpose:** To undertake primary and secondary nutrition research through basic science, human interventions, population studies and evidence syntheses to inform nutrition and health policy and practice. Through BMJ NPH, we also act as a publisher of relevant, peer reviewed literature.

**Progress to Date:**

- Significant grant funded projects and initiatives
- Published over 300 journal articles
- Delivered over 100 scientific presentations
- Contributes to a regular column in the Complete Nutrition Magazine that has a readership of more than 15,000 health researchers and practitioners

**Future Plans:** We plan to continue to develop and support publication of high quality and high impact work relevant for individual and population level across the food and health systems. We will also strengthen our research collaborations with international centres of excellence focussing on nutrition research relating to cardiometabolic prevention, global challenges, healthcare education and COVID-19.

**Milestones**

- To have an Impact Factor and reach 100th research publication in BMJ NPH
- To achieve citations and case studies of impact from primary research
- Longer term programme level research funding

**Alignment:** Nutrition Research and Innovation Consortium (NRIC)
5. To work towards minimising nutrition and health inequity by empowering individuals and driving systemic change for underserved populations

A key example of our work towards minimizing inequity is demonstrated in India, where we have utilised a grassroot approach to develop a network with a mixture of trained healthcare professionals and lay volunteers to perform education and public health interventions. One such project which exemplifies this is our “Mobile Teaching Kitchen” (MTK), which empowers marginalised populations to produce nutritionally balanced meals with local and affordable ingredients. This initiative educated local volunteers and participants through a “Mobile Teaching Kitchen” (and associated ‘Bhavishya Shakti Cooperative Society’), which originated in Kolkata, and is now being replicated across India, and set-up globally. This approach targeted not only the improvement of nutritional status but also breaking educational and social barriers to disseminate information and culinary practice following the model of “See one, Do one, Teach One”. We continue to collaborate with TIG2RESS, a project aiming to stimulate a second green revolution in India, revitalising its agricultural expertise. We have worked together to show the benefit of neglected local crops such as millets, working with researchers of the “Millet Mission” of TIG2RESS.

**Purpose:** To minimize the nutrition and health inequities gap through building transferrable and scalable models of lean innovation and through the empowerment of underserved populations.

**Progress to Date:** Work to date has focused on 3 main domains:

1) **Underserved populations** – By instigating action research to improve nutritional health and overall wellbeing within such groups

2) **Members of the public including families and working professionals** – By increasing public understanding of nutritional prevention through awareness, education and training around food choices, cooking and diet-lifestyle patterns, including occupational wellbeing programmes aimed at improving workplace productivity through adequate provision of Nutrition and Hydration

3) **Nutrition Researchers, Educators and Change-Drivers** – Commission small but impactful projects, piloting novel ideas requiring ‘first break’ funding and support.

**Future Plans:** To work more closely with other social and humanitarian organisations. Further expansion of the MTK projects, allowing different communities to receive education, whilst adapting the project to differing environments.

**Milestones**
- Adaptation of MTK model to another low-middle income country
- Adaptation of MTK model to a high-income country
- Formulation of a “Template” to replicate the MTK including “Standard operating procedure”, as well as a handbook to outline to funders what may be required.

**Alignment:** Nutritional equity and population health
6. Drive the implementation of nutrition knowledge into policy, practice, and wider food, health and social systems, by providing leadership, advocacy, and encouraging collaboration with like-minded individuals and organisations

Using the evidence base of implementation science, behaviour change, educational theory and systems thinking, we are working to influence policy and put it into practice. Being leaders in the field advocating for issues relevant to public health and equity, we increase implementation of nutrition knowledge into policy and practice.

With over a decade of experience advocating for greater nutrition education and knowledge acquisition, NNEdPro is now in a unique position to create synergy among groups with similar aims and objectives to make greater impact. This is exemplified by the launch of the recent ‘Nutrition Implementation Coalition’ consisting of independent organisations involved in either the promotion development, delivery or evaluation of nutrition education. Hosted by the UK & Ireland network this increases capacity and a wider pool of expertise. This mutually beneficial arrangement is a commitment of collaboration rather than competition for the benefit of population and individual health and to improve nutrition practices across healthcare.

**Purpose:** To drive implementation of nutrition knowledge into policy and practice by conducting primary research, evidence synthesis, and improving access to high quality, translatable information for food, health and social stakeholders and practitioners.

**Progress to Date:** The Nutrition Education Policy for Health Practice (NEPHELP) model seeks to change the default status of nutrition education within health systems by strengthening the nutrition workforce. NEPHELP delivered a pilot workshop followed by a roadshow of teaching sessions for junior doctors and GPs in the UK. From here it has led to outputs of a peer reviewed paper, “Time for Nutrition in Medical Education” in the BMJ NPH. It will be adapted further for focus on Primary care, with further outputs of research analysing the feedback and experiences of the project to date.

Through collaboration with the World Health Organization (and others), we are building expertise in policy implementation. Projects, such as our work that led to our publication, *WHO Global Architecture for the Nutrition Training of Health Professionals: A Mapping Exercise and Blueprint for Next Steps*, provide clear direction on next steps.

**Future Plans:** Focus on integrating evidence into policy, particularly on addressing undernutrition in developing countries. Emphasis will also be placed on national policy, specifically for the integration of nutrition education into healthcare curricula.

**Milestones**
- Achievement of educational or public health policy changes nationally and/or internationally on the inclusion of mandatory and elective competencies on nutrition in medicine and healthcare

**Alignment:** Implementation Research and Consulting in Nutrition (IRCN)

*Please see Appendix 2 for the Advocacy and Impact Strategy*
7. To function as an agile nutrition think-tank with high quality infrastructure for provision of consultancy services

Through our consulting services and action-orientated research, we design and conduct education and implementation programmes for individuals or organisations. For example, if a medical or healthcare education provider wishes to incorporate nutrition in their curriculum, we provide direction on the course content as well as strategies for delivery and evaluation of impact. On the other hand, if an organisation wishes to strengthen nutrition related knowledge and skills within their operations, we can drive implementation and change management in this area.

**Purpose:** To provide consultancy services that align with our strategic aims.

**Progress to Date:** To date, we have accepted a small number of consultancy projects including recent work with the World Health Organization, Swiss Re institute and the UK University sector over 2019/20.

**Future Plans:** Plans are underway for a more structured approach to consultancy, facilitating full use of the NNEdPro Network and providing equal opportunity to apply within each group.

**Milestones**
- To obtain our first major medium to long term client following the operationalisation of our consultancy strategy
- More milestones TBA
- Establish a “Consultancy team” who can lead the core work whilst bringing in expertise from the wider NNEdPro team when required
- Develop an externally facing document to show what services we can help with, as well as the process for which we will review propositions.

**Alignment:** Implementation Research & Consulting in Nutrition
8. To facilitate the funding and commissioning of nutrition related projects in priority areas

The NNEdPro Global Centre for Nutrition and Health and its strategic partner, the Global Open Data for Agriculture and Nutrition (GODAN) have come together to co-lead the International Food and Nutrition Trust C.I.C. (a Community Interest Company (CIC)) based in the United Kingdom. The main purpose of this trust is to function as a project co-ordinator for grant giving related to food and nutrition projects around the world. It will play a major role in supporting grant management for several innovations including I-KANN-25 projects.

The CIC will create a strong funding base in order to tackle a wide range of health, nutrition and food security and safety issues. The beneficiaries of these grants/funds will be healthcare researchers, practitioners, NGOs, charitable organisations and other stakeholders involved in implementing nutrition education tools and policies thus improving the access to high quality translatable information for health system practitioners and society at large. The strategic direction towards this grant giving function will be provided by I-KANN-25 initiative/project which will then identify the gaps in the evidence base which the grants will then seek to fulfil.

Some of the thematic areas that this grant giving body will address through I-KANN-25 is Nutrition and Covid-19, Nutrition and Cardiovascular diseases, and Food and Nutrition Security.

Purpose:
A key aim of this would be to tie in to strategy 5 of minimising inequity, by providing funding to geographical areas which are typically underreported.

Progress to Date and Future Plans: This is a new initiative and plans are underway to provide a strong foundation for the Trust.

Milestones
- To provide funding to the first individual or organisation.
- Support greater access and use of government held data.
- To tackle challenges around food security and adequate nutrition;
  - i) create prevention and intervention strategies in agriculture and the food chain; and
  - ii) promote nutrition research and education focussed on at-risk communities, and develop advocacy to support relevant policy impacts.

9. To advocate for a focus on sustainability and climate change within food and nutrition related research and practice

To begin to consider issues around diet sustainability and climate change, NNEdPro will take a multifactorial and multidisciplinary approach, working with stakeholders from different backgrounds and expertise. Working with stakeholders from within the food and healthcare systems, as well as key political figures, NNEdPro can work towards influencing individual, organisational and system level change to a more sustainability and climate friendly initiatives. Given NNEdPro’s independence, it is in an ideal position to effectively draw together the key stakeholders for maximum improvements in food systems locally, regionally, and globally.

**Purpose:** To take a multifactorial and multidisciplinary approach to integrate issues of sustainability and climate change within our work from the food and health system perspectives.

**Progress to Date:** Work to date has focused on advocacy and awareness, including a Special Collection and Editorial in BMJ NPH on Diet Sustainability and Climate Change. The third volume of the NNEdPro Virtual Journal Club discussed a paper focusing on dietary patterns, health and environmental sustainability to raise the profile of the Special Collection.

**Future Plans:** NNEdPro recognizes the difficulty of working in this space yet acknowledges the serious need to not only increase awareness, but also support individuals and organisations to move towards more sustainable and climate friendly initiatives. We are uniquely positioned to provide the bridge between the food and the healthcare systems, building on evidence from nutrition research, implementation science and behaviour change.

**Milestones**
- First external submission to the BMJ NPH Special Collection
- First NNEdPro submission to the BMJ NPH Special Collection
- Online learning module in Diet Sustainability

**Alignment:** Nutritional Equity and Population Health (NEPH)
Enablers

The NNEdPro Global Centre has a unique set of expertise and resources today with a plan for continued growth into the future:

- Extensive networks of passionate individuals and organisations
- Strong supporters of interdisciplinary collaboration and taking a systems perspective
- Scientific expertise across a range of topics ranging from basic science through to knowledge translation
- An award-winning interdisciplinary think-tank
- Experts in nutrition education, research and innovation
- Promotion of development within, enabling early-career members to provide equal input to senior members and work towards leadership and strategy roles.
- Access to dynamic online environment to support collaboration, learning and research across geographical and professional boundaries.