

PhD Project Advertisement

Project title: Plant-based diets for older people in care homes: a realist and psychobiological evaluation.

Project No: FBS2024-007-Tischler-sr

Lead supervisor: Victoria Tischler, Psychology, University of Surrey

Email: v.tischler@surrey.ac.uk

Co-supervisors:

Lisa Methven, University of Reading

Kathrin Cohen Kadosh, University of Surrey

Hannah Theobald, Marlow Foods

Project description:

Context: Are you looking for a doctoral project that combines food science, psychology and nutrition? Do you have a passion for working with older people in real world settings? Are you interested in food systems and collaboration with industry? This could be the project for you!

This project will involve working with older people in care settings to improve understanding and access to plant-based or vegan diets (referred to as plant-based in this project description). This includes those who eat food derived from plants and fungi, and avoid all foodstuffs that come from animals. This means for example that they do not eat or consume meat, dairy (milk, cream, yoghurt), seafood, eggs and honey. People may choose to follow a plant-based diet due to health, religious, environmental, philosophical or other ethical reasons. For example, some people who are vegan avoid meat and dairy products because they believe it is wrong to eat animals from an animal welfare perspective, others may follow a plant-based diet for health or environmental reasons.

This is important as the numbers of people following a plant-based diet or reducing meat and dairy consumption are growing globally, especially in Europe. Also, people are living longer across the world. As we reach older age, the likelihood of serious health conditions such as dementia increase, and with this, the need for increased support, or formal care. Human ageing can lead to sensory loss such as a poorer sense of smell and taste, that can reduce the taste and enjoyment of food, leading to loss of appetite. This can mean that there is an increased risk of poor health due to weight loss or reduction of muscle mass, that can create other health problems. Those with dementia can experience these issues plus they may have problems with swallowing and recognising food which makes mealtimes difficult for them and for those who provide care, for example, they may refuse to eat or become distressed.

This research focusses on care homes as many older people living in such settings have dementia. There have also been reports that people's dietary wishes regarding plant-based diets are not being respected in care homes, leading to poorer care and loss of dignity.

Purpose: The project will test the prediction that older adults in care settings can be healthy whilst following a plant-based diet. A range of methods will be used to help understand the needs of care home residents and to design plant-based meals that offer good smell and taste, that have the right amount of protein to support good mental and physical health, and that make the meal enjoyable. These include reviewing relevant previous research and practice (known as a realist review) with the aim of developing a theory about how plant-based meals in care homes could be best delivered. The theory identifies the most important contexts, mechanisms and outcomes to make this happen. For example, the dining room setting in a care home could be a context, the way plant-based food is presented by a carer to someone with dementia could be a mechanism, and the outcome could be the quality of life of someone with dementia after eating plant-based foods. This theory will inform a study in care homes exploring eating behaviour and nutrition in a real-world environment. This will look at a range of factors including cognition (thought, mood, memory, emotion), quality of life, communication between people with dementia and carers, and nutritional information. Finally, the findings will be shared with a range of academic, clinical, community and policy audiences to ensure the project has wide impact.

Novelty: The project is exciting and innovative as it will inform plant-based food provision for older adults in care homes, now and in the future. The research is inclusive of care home residents with dementia who have historically been neglected in this type of study. They represent a large and growing population who experience sensory loss meaning that they may experience loss of appetite, and potentially malnutrition. The study findings are likely to improve the provision of plant-based diets which will have care and wider societal benefits regarding sustainable food systems and environmental benefits with a reduction in meat and dairy consumption.

Training opportunities:

The project benefits from a 3-month placement with Quorn Foods. Quorn is a widely available brand of products made from mycoprotein- which is made from fungus. Quorn products are widely available and used as meat substitutes. The company's Head of Nutrition is part of the supervisory team. This offers the student a deep understanding of working in industry, food development, and sustainability.

The student will develop skills in systematic literature review using a realist approach, realist evaluation including development of theory, mixed methods research including cognitive testing, quantitative and qualitative data analysis, and oral and written presentation skills. Fieldwork will be undertaken in care settings. The lead supervisor (Prof. Tischler) has excellent links with care providers who are interested in participating in research studies. This offers the student the opportunity to learn more about the care of older people including those who are frail and living with dementia.

The project benefits from input from Dr Jeanette Rowley, a vegan advocate with a background in human rights law. She has worked extensively as a consultant and has policy expertise, and the student will have the opportunity to develop skills in these areas.

Student profile:

The student may be from a range of disciplines including psychology, nutrition and dietetics, food science, and sensory science. It is important that the student is interested in working with older adults, including those with dementia, open to cross-disciplinary research and comfortable with, or willing to learn and use a range of mixed quantitative and qualitative psychobiological methods.

Stipend (Salary):

FoodBioSystems DTP students receive an annual tax free stipend (salary) that is paid in instalments throughout the year. For 2023/24 this is £18,622 and it will increase slightly each year at rate set by UKRI.

Equality Diversity and Inclusion:

The FoodBioSystems DTP is committed to equality, diversity and inclusion (EDI), to building a doctoral researcher(DR) and staff body that reflects the diversity of society, and to encourage applications from under-represented and disadvantaged groups. Our actions to promote diversity and inclusion are detailed on the [FoodBioSystems DTP website](#).

In accordance with UKRI guidelines, our studentships are offered on a part time basis in addition to full time registration. The minimum registration is 50% FT and the studentship end date will be extended to reflect the part-time registration.

References:

- Alzheimer's Disease International (2023) World Alzheimer Report. <https://www.alzint.org/resource/world-alzheimer-report-2023/>
- Alzheimer's Society (2023) Poor Appetite and Dementia <https://www.alzheimers.org.uk/get-support/daily-living/poor-appetite-dementia>
- Bunn D, Abdelhamid A, Copley M et al. (2016) Effectiveness of interventions to indirectly support food and drink intake in people with dementia: Eating and Drinking Well IN dementia (EDWINA) systematic review. *BMC Geriatr.* 2016;16(1). doi:10.1186/s12877-016-0256-8
- Doty, R. L., & Kamath, V. (2014). The influences of age on olfaction: A review. *Frontiers in Psychology*, 5, Article 20. <https://doi.org/10.3389/fpsyg.2014.00020>
- Straits research (2020) Vegan Food market <https://straitsresearch.com/report/vegan-food-market/>
- Tian, Qu et al. Olfaction, cognitive impairment, and PET biomarkers in community-dwelling older adults. *Journal of Alzheimer's Disease.* 2022;86(3):1275-1285. doi: 10.3233/JAD-210636.
- VegAPPG (2021) Respect for religious and philosophical beliefs while eating in care <https://vegappg.org.uk/wp-content/uploads/2021/11/VegAPPG-beliefs-respect-report-1.pdf>
- World Health Organisation (2023) <https://www.who.int/news-room/fact-sheets/detail/dementia>

For up to date information on funding eligibility, studentship rates and part time registration, please visit the [FoodBioSystems website](#).