

Is a healthy diet enough?

Alison While, Emeritus Professor of Community Nursing, Florence Nightingale Faculty of Nursing, King's College London and Midwifery and Fellow of the Queen's Nursing Institute

Population ageing is a global phenomenon. While 'developed' countries, such as the UK show the most rapidly ageing populations, it is also evident in China and South America (Office of National Statistics (ONS), 2018). Much has been said about the increasing health needs of the UK's ageing population and the demands that it places upon the NHS. In particular, the cost of healthcare notably increases when people reach 65 years of age, due, in part, to hospital admissions (ONS, 2018). An ageing population is also accompanied by a changing population structure (due to an increase in life expectancy, decrease in fertility and a delay in childrearing), which has implications for the economy, services and society (ONS, 2018).

The challenge of global ageing was recognised by the World Health Organization (WHO) in 2016. It created the Global Strategy and Action Plan on Ageing and Health 2016–2020 (World Health Assembly, 2016), which focused on healthy ageing, alongside the preparation for the 'Decade of Healthy Ageing 2021–2030' (WHO, 2020) that aims to optimise older people's functional ability over the decade. The plan has four areas of action to promote health, prevent disease and maintain capacities, namely: changing attitudes to age and ageing; fostering the abilities of older people; the provision of responsive person-centred primary health services and integrated care; and the creation of access to long-term care for those who need it. Therefore, the varying health needs of people as they age are recognised, but more importantly, so are the imperatives of promoting health and preventing disease by offering choices and influencing behaviours to maximise health gain.

Diet, among other lifestyle factors, plays a key role in the maintenance of a good health status as people age. The 'Mediterranean diet', characterised by lots of vegetables, fruits, whole grains, nuts, olive oil, fish, meat or dairy, red wine and few eggs or sweets, has positive health outcomes, including healthy longevity (Hsiao and Chen, 2022). More recently, dietary variety has been advocated, with Professor Tim Spector (2022), co-founder of the COVID-19 Zoe app, recommending a diet with 30 different plants a week to maximise gut health. The benefit of dietary diversity has been demonstrated in a large cohort study (Chinese Longitudinal Healthy Longevity Study; n=17 959 participants; mean age of 84.8 years old at baseline), with those with the highest dietary diversity scores having the lowest mortality rate. Those participants who maintained a high dietary diversity had a decreased risk of mortality, in contrast to those with a lower dietary diversity or whose dietary diversity declined, having an increased mortality risk as older adults (Liu et al, 2021). Liu et al (2021) suggested that the unexpected finding regarding 'extreme' improvement in dietary diversity and increased mortality risk was due to participants' characteristics, including unhealthy behaviours, higher presence of long-term conditions such as cardiovascular diseases, and poor family care (Chinese law requires families to care for their elders (filial duty)). Hsiao et al (2022) also found an association between higher dietary diversity and healthy ageing in their 4-year cohort study (Taiwan Longitudinal Study of Aging; n=3213 (n=1296, aged 50–64 years; n=1224, aged 65–74 years; n=693, aged 65 years and over)).

Another approach focuses on particular nutrients, such as the anti-inflammatory and antioxidant properties of dark coloured fruit and vegetables, and protein intake to maintain muscle health, retain muscle mass and strength, and promote healthy ageing (Hsiao and Chen, 2022). Robinson et al (2018) have argued that there is growing evidence that there is an association between nutrition and muscle mass, strength and function in older adults. This review highlights the importance of the quality of a diet with sufficient intakes of protein, vitamin D, antioxidant nutrients and long-chain fatty acids. Robinson et al (2018) noted that 'healthier' diets that have greater fruit and vegetable content are usually also characterised by higher intakes of a range of key nutrients. In other words, dietary intakes, which include a range of fruits and vegetables tends to also include the other key dietary components.

'Diet, among lifestyle factors, plays a key role in the maintenance of a good health status as people age.'



Alison While

However, a healthy diet on its own is not sufficient and needs to be accompanied by other healthy behaviours, such as remaining physically active and socially connected, thereby 'adding life to years' (UK Research and Innovation (UKRI), 2022). Furthermore, there is evidence that social factors, like living or eating alone, are associated with simpler food choices and lower dietary diversity and subsequent poorer health outcomes (Hsiao and Chen, 2022). To this end, UKRI (2022) are sponsoring a range of projects to promote active leisure, the health and well-being of vulnerable people as they age through physical activity, social connectivity, healthier working lives as people age, and solutions for independent living as people age.

The Centre for Ageing Better (2021) noted that low physical activity levels were a contributor to poor health outcomes before the COVID-19 pandemic; however, physical activity levels are lower than before the pandemic, with some people remaining as inactive as they were pre-pandemic. Physical activity reduces as people age. There is evidence that people know that being active physically is good for them, but there can be a complex range of barriers that stop people from becoming physically active (Centre for Ageing Better, 2021). Examples of psychological barriers/motivators include how the individual perceives themselves (as sporty or non-sporty), negative role models, desire to maintain independence, weight management and confidence. Examples of practical barriers/motivators include peer and family support, financial costs and access to facilities, long-term conditions and caring obligations.

In this study, people identified retirement as a watershed moment, with some planning to increase their physical activity but many had not considered how they would achieve their ambitions, while some who had retired had adopted specific routines, which lead to them being very physically active. However, having more time and desire to exercise in retirement does not necessarily mean that a person will be physically active. At a local level, people need a variety of opportunities for physical activity that align with their preferences but also encouragement to try out various strategies to incorporate physical activity in to their daily lives. This may include everyday activities such as walking to the shops or gardening.

Community nurses are in an excellent position to be health promoters and role models both to their clients, their carers and families. 'Making Every Contact Count' (Public Health England, 2016) offers the opportunity to contribute to healthy ageing. **BJCN**

- Centre for Ageing Better. Keeping on the move: understanding physical inactivity among 50-70 year olds. 2021. <https://ageing-better.org.uk/resources/keep-on-moving-understanding-physical-inactivity-among-50-70-year-olds> (accessed 28 February 2023)
- Hsiao FY, Chen LK. What constitutes healthy diet in healthy longevity. *Arch Gerontol Geriatr.* 2022;102:104761. <https://doi.org/10.1016/j.archger.2022.104761>
- Hsiao FY, Peng LN, Lee WJ, Chen LK. Higher dietary diversity and better healthy aging: a 4-year study of community-dwelling middle-aged and older adults from the Taiwan Longitudinal Study of Aging. *Exp Gerontol.* 2022;168:111929. <https://doi.org/10.1016/j.exger.2022.111929>
- Liu D, Zhang XR, Li ZH et al. Association of dietary diversity changes and mortality among older people: a prospective cohort study. *Clin Nutr.* 2021;40(5):2620-2629. <https://doi.org/10.1016/j.clnu.2021.04.012>
- Office of National Statistics. Living longer. 2018. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/livinglongerhowourpopulationischangingandwhyitmatters/2018-08-13> (accessed 28 February 2023)
- Public Health England. Making Every Contact Count (MECC): consensus statement. 2016. <https://www.england.nhs.uk/wp-content/uploads/2016/04/making-every-contact-count.pdf> (accessed 28 February 2023)
- Robinson SM, Reginster JY, Rizzoli R et al. ESCEO working group. Does nutrition play a role in the prevention and management of sarcopenia? *Clin Nutr.* 2018;37(4):1121-1132. <https://doi.org/10.1016/j.clnu.2017.08.016>
- Spector T. Professor Tim Spector's top five tips for a healthier gut microbiome. 2022. <https://tinyurl.com/sx55zz3j> (accessed 28 February 2023)
- UK Research and Innovation. Our story so far: healthy ageing challenge report 2022. 2022. <https://www.ukri.org/publications/our-story-so-far-healthy-ageing-challenge-report-2022/> (accessed 28 February 2023)
- World Health Assembly. The global strategy and action plan on ageing and health 2016-2020: towards a world in which everyone can live a long and healthy life. 2016. <https://apps.who.int/iris/handle/10665/252783> (accessed 1 March 2023)
- World Health Organization. Decade of healthy ageing: baseline report. 2020. <https://www.who.int/initiatives/decade-of-healthy-ageing> (accessed 28 February 2023)