



# UNLOCKING THE CENTENARIAN CODE: THE UNVEILED TRUTH BEHIND LIFELONG VITALITY AND WELL-BEING

A RESEARCH BRIEF BY THE UNSW AGEING FUTURES INSTITUTE

New research highlights several practical lifestyle strategies for improving diets and nutrition - key non-pharmacologic approaches for managing health risks and improving the quality of life in ageing.

### **BACKGROUND AND CURRENT ISSUE**

Population ageing poses challenges globally due to declining fertility rates and increasing life expectancy [1]. This shift impacts productivity and healthcare costs, especially in high-and mid-income countries. Centenarians exemplify successful ageing, with fewer chronic diseases, and maintain daily life independence well into their 90s [2]. While genetics play a role, environmental factors account for over 60% of successful ageing. Understanding what we can do in daily life can significantly improve disease management, promote well-being, and extend the biological and chronological clock.

## **SUMMARY OF CURRENT RESEARCH**

A new systematic review of 34 epidemiological studies is one of its kind, focusing on diet and medication use in healthy ageing among community-based dwelling centenarians and near centenarians worldwide [3]. The findings reveal the importance of a nutritionally balanced (60% carbohydrates, 19% protein, and 30% fats) and diverse diet captured by the dietary diversity score, controlled salt intake in alignment with the WHO recommendation of less than 2g/day sodium [4], and body weight maintenance (normal weight/slightly overweight) in mitigating mortality risks and physical functional decline. Polypharmacy (usually defined as taking five or more medications simultaneously) is an anomaly in people with extreme longevity. Rural lifestyles and sleep satisfaction are among other lifestyle factors that deserve attention to promote healthy longevity. Future research will focus on optimising sustainable dietary practices in disease management and wellbeing in older adults from diverse backgrounds.

# **RECOMMENDATIONS AND IMPLICATIONS**

These findings offer valuable guidance for enhancing healthcare practices and crafting lifestyle-based medicine approaches to promote the high quality of ageing life worldwide. In countries like Australia, which is home to many migrants from culturally and linguistically diverse backgrounds, we recommend making culturally appropriate food and dietary options available in community, clinical, and care settings to improve diet quality and reduce malnutrition risk. Additionally, investing in accessible green spaces with tree canopies in residential areas is crucial to enhancing healthy ageing.

## REFERENCES

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- 3. Dai, Z., Lee, S.Y., Sharma, S. et al. A systematic review of diet and medication use among centenarians and near-centenarians worldwide. GeroScience (2024). https://doi.org/10.1007/s11357-024-01247-4. 4. World Health Organization. Salt intake. 2024.





### ABOUT THE AUTHOR

Dr Zhaoli Dai-Keller, Lecturer at the School of Population Health, UNSW, is a nutritional epidemiologist focusing on promoting sustainable diet and nutrition to enhance healthy aging and longevity in culturally diverse populations. Her research, from epidemiological studies to healthcare system and policy research, is designed to improve the dietary quality of older people from diverse backgrounds. The goal of her research is to use food as medicine to better manage chronic diseases and well-being in older people and design and implement cost-effective interventions to reduce malnutrition in community and healthcare settings.