Proceedings of the Nutrition Society

cambridge.org/pns

The 49th Annual Scientific Meeting of the Nutrition Society of Australia, 3-5 December 2025

Cite this article: Costanzo A, Ashton LC, and Liem DG (2026). Changes in taste perception during menopause. *Proceedings of the Nutrition Society* **85**(OCE2): E187. doi: 10.1017/S0029665126104285

Changes in taste perception during menopause

A. Costanzo, L.C. Ashton and D.G. Liem

School of Exercise and Nutrition Sciences, Deakin University, Burwood, VIC, Australia

Menopausal transitioning is a period where women experience changes to their eating behaviours, appetite, mood, and food intake. More severe menopausal symptoms are associated with increased consumption of discretionary foods (high in energy, sodium, sugar, and fat) and inadequate intake of nutritious alternatives[1]. This may contribute to the increased risk of non-communicable diseases (NCD), such as cardiovascular disease, observed in older women[2]. Taste perception is one biological mechanism that mediates cravings, selection, and intake of discretionary foods. Understanding taste perception is important for interceding food preferences, dietary patterns, and eating behaviours. Taste sensitivities are known to decline with aging[3], although female-specific taste loss is not well studied in current research. Considering the prevalence of NCDs in post-menopausal women, targeting taste perception as a biological mechanism driving consumption could aid in prevention and treatment of NCDs in older women. This prompted the research question: *Do taste sensitivities differ between pre-, peri-, and post-menopausal women?* This exploratory research was a quantitative cross-sectional online survey. The survey contained five sections: menopausal status and symptoms; self-reported taste perception; a food liking questionnaire; a food frequency questionnaire; and general dietary health questions. Adult females (based on biological sex) aged 18+ years were recruited; and excluded if they had ever experienced any sexual health disorders (e.g., polycystic ovary syndrome), were using or had used hormonal contraceptives in the last 6 months, have had hormone replacement therapy, were pregnant or lactating, or were current or previous smokers. One-way ANOVAs were conducted to compare the means of the primary outcomes to determine differences between women based on menopausal status. Preliminary analysis of 141 participants suggest that peri-menopausal women (n = 51) were more likely to report a decreased ability to perceive all tastes (sweet, sour, salty, bitter, umami, and fatty) in the last 12 months compared to pre-menopausal (n = 39) and post-menopausal (n = 51) women ($p < 0.05$). Further outcomes from this survey are under investigation. The outcomes from this study aim to provide an improved understanding of the relationship between ovarian hormones and taste perception as a potential mediator of eating behaviour across different life-stages of females. It may also provide rationale for personalised dietary interventions to consider the impact of menopause on taste perception and dietary behaviour.

References

1. Noll PR, Campos CA, Leone C, *et al.* (2021) *Climacteric* **24**(2), 128–138.
2. Australian Institute of Health and Welfare (2019) . *Cardiovascular disease in women* https://www.aihw.gov.au/getmedia/25915222-41b7-4697-b877-8a8d7daaa836/aihw-cdk-15.pdf
3. Glanville EV, Kaplan AR, Fischer R (1964) *J Gerontol* **19**, 474–478.

© The Author(s), 2026. Published by Cambridge University Press on behalf of The Nutrition Society.