

Food Security and Older Adults: Creating Age-Friendly Communities



THE OHIO STATE UNIVERSITY

COLLEGE OF SOCIAL WORK

Katie Simpson, MSW, LISW-S, Doctoral Student, College of Social Work

Holly Dabelko-Schoeny, PhD, Professor and Director of Research, Age-Friendly Innovation Center

Background

- By 2030, 1 in 6 people worldwide will be 60 or older.
- Between 2030 and 2050, the number of adults aged 60 or older will increase from 1 to 1.4 billion.
- 2.4 billion people (29.6%) experience food insecurity worldwide, though there is no global measure of food insecurity among older adults (WHO, 2025).
- Older adults are particularly vulnerable to food insecurity due to social factors that influence healthy aging and well-being, including perceived health status, loneliness, and needing to utilize more food obtainment methods.

Age-Friendly Communities

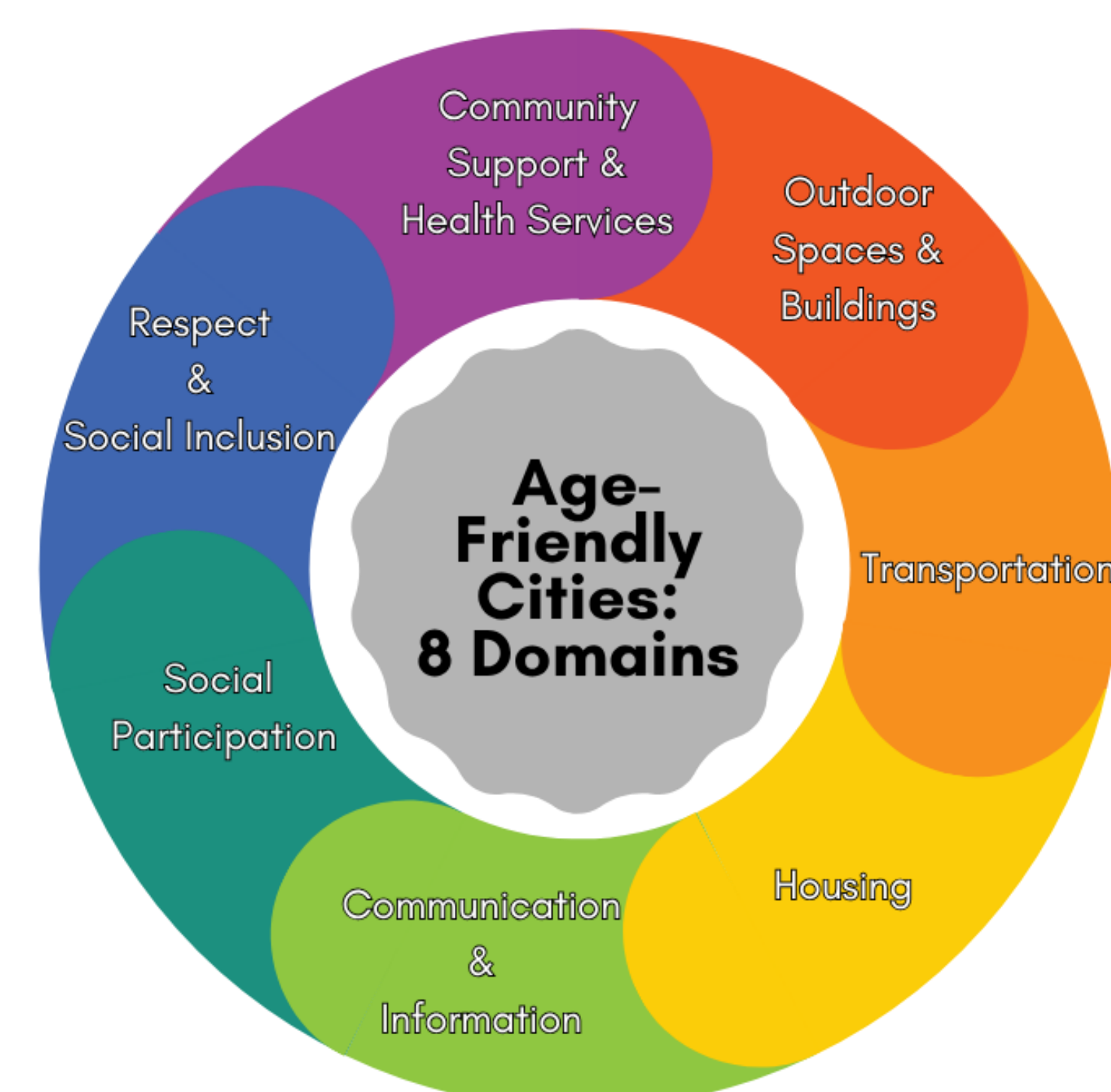
- The WHO launched the Global Network for Age-Friendly Cities and Communities (AFCC) in 2010.
- Age-friendly cities encourage active aging through adapting structures and services to increase inclusion of older adults.
- Food security and access are not included despite their profound impact on older adults and healthy aging across the lifespan.

Study Objectives

Use regional data gathered through the 2021 Central Ohio Regional Assessment on Aging (CORAA) to:

1. Examine the association between food security status and perceived health status among older adults
2. Examine the association between food security status and loneliness among older adults
3. Examine the association between food security status and the number of methods older adults use to obtain food
4. Illustrate the need to include food security and access as a primary construct within the AFCC framework

8 Domains of Age-Friendly Cities and Communities



Methods

- Data were analyzed using the 2021 CORAA survey dataset.
- A total of 1,417 older adults (50 and older) were surveyed from 8 central Ohio counties using randomized mailing and follow-up communication.
- Most respondents lived in Franklin County (56.9%), were white (81.5%), lived with their spouse (57%), and had a household income between \$10,000 - \$24,999 (13.9%).
- 7.5% experienced food insecurity.
- A One-Way Analysis of Variance (ANOVA) was used to examine the mean differences between variables.
- Post-hoc tests (Bonferroni, Tukey HSD, and Games-Howell) were conducted as appropriate.
- All missing variables were moved in a listwise deletion as indicated by the missing variable analysis (data missing at random).

Variables

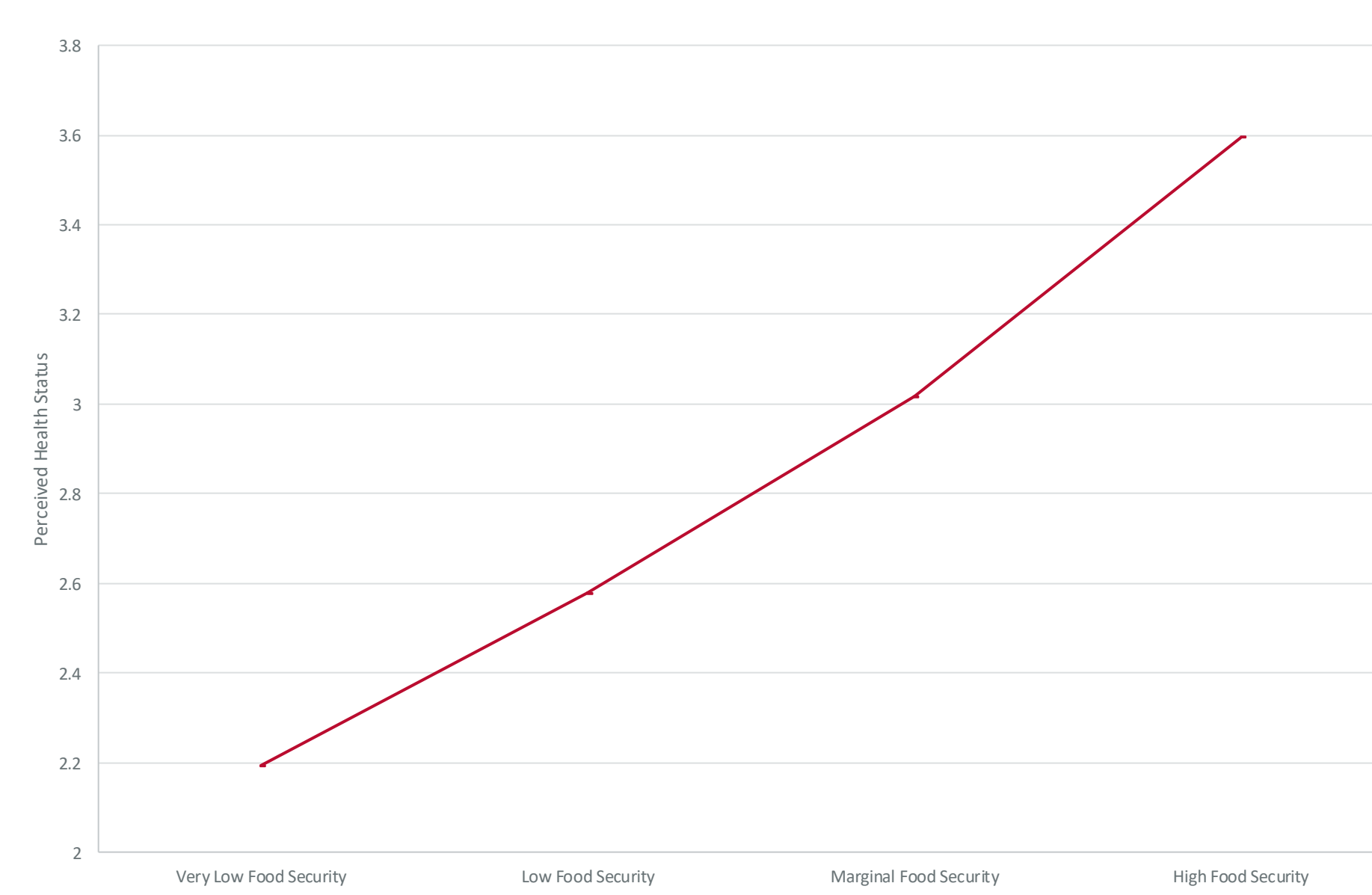
Food Security – one-item Likert scale question recoded into categorical values of *very low food security*, *low food security*, *marginal food security*, and *high food security*.

Perceived Health Status – using the PROMIS Global Health question to indicate *poor* to *excellent* health status.

Loneliness – UCLA 3-Item Loneliness scale using categorical cut-off values of not, low, and high.

Food Obtainment – count value measured from 9 methods.

Perceived Health Status & Food Security



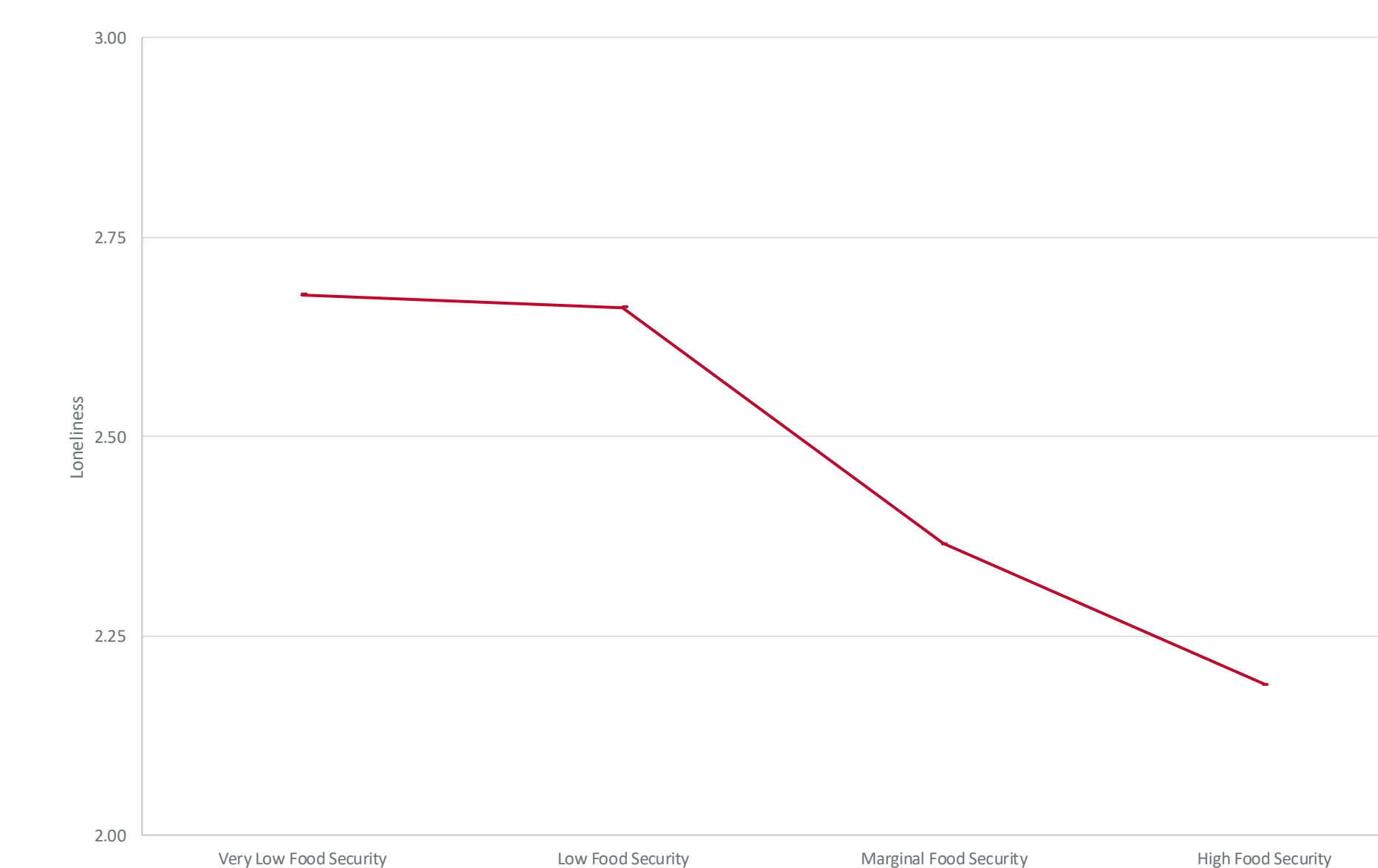
Perceived Health & Food Security

- Results indicate a statistically significant difference in perceived health status levels and food security with a large effect size ($F(3, 1372) = 56.79, p < .001, \eta^2 = .11$).
- Older adults experiencing higher rates of food security also reported significantly higher perceived health status.
- These differences disappear when comparing the perceived health status between older adults experiencing low and very low food security ($p = .257$).

Loneliness & Food Security

- Results indicate statistically significant differences in loneliness scores and food security status and a medium effect size ($F(3, 100.526) = 31.658, p < .001, \eta^2 = .08$).
- Older adults experiencing high food security had significantly lower loneliness scores than all other food security groups ($p < .001$).
- Older adults experiencing very low food security reported significantly higher loneliness scores than those experiencing high ($p < .001$) and moderate food security ($p = .046$).
- Older adults experiencing low and very low food security did not demonstrate a statistically significant difference ($p = .999$).

Loneliness & Food Security



Food Obtainment & Food Security



Food Obtainment & Food Security

- Results indicate a statistically significant difference between the number of food obtainment methods and level of food security with a medium effect size ($F(4, 41.88) = 18.18, p < .001, \eta^2 = .10$).
- Older adults using one food obtainment method have significantly higher food security scores than older adults using three ($p < .001$), four ($p = .013$), and five or more food obtainment methods ($p < .001$).
- There was no significant difference between older adults using one and older adults using five or more obtainment methods ($p = .063$), possibly due to the small sample size in the latter group ($n = 9$).

Implications

- Findings are consistent with existing literature that describes the considerable impact of food insecurity outside of just access to food resources.
- Increasing access to nutritious and healthy foods could also improve older adults' perceived health status and decrease loneliness.
- Efforts should be made to increase awareness of food and nutrition security programs, as older adults experiencing food security rely on more methods to obtain food.
- Food security should be included as a domain within the AFCC framework to support healthy aging.

Bibliography

World Health Organization. (2025). *Ageing and health*. Retrieved February 18, 2026, from <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>