



What is Aging?

Aging simply refers to changes that occur in the human body over time (e.g., sensory decline, decline in muscle mass, slower reaction time).¹ While age-related changes increase the risk of developing chronic disease, chronic diseases are not considered normal aging.^{2,3} Nor is chronic disease and decline the whole story of advancing age. In addition, some declines or losses associated with aging may be the byproduct of civilization. For example, severe hearing loss in older adults may be related to lifelong exposure to the noisy environment of the modern world (concert attendance, machinery use, etc.).⁴

Positive changes may also occur with increasing age.^{1,5,6} More life experience can lead to greater knowledge or crystallized intelligence and greater interpersonal competence, which can foster enhanced mental and emotional maturity (e.g., wisdom).^{1,5} Unfortunately, these gains receive little attention, leaving the average adult to believe there is nothing good about getting older.

Why are diseases more common in older adults?

Age-related changes in the body (stiffening of the blood vessels and arteries) increase the risk of developing chronic disease like heart disease.^{2,3} However, strategies are known to delay the onset of chronic disease, yet many adults continue to engage in behavior known to be a precursor to chronic disease (high sodium diets, smoking, poor sleep, etc.).¹



Individual behaviors are only one aspect of preventing chronic disease. Outcomes in older age are an aggregate of many factors.¹ Unfortunately, many of these things are outside the control of the average person.

These factors include:

- **Attitudes and beliefs about aging:** Each person has attitudes and beliefs about what advancing age means, which shape health outcomes in older age.^{7,8} Positive attitudes and beliefs contribute to better physical health and mental wellness, while negative beliefs are associated with poor health outcomes. Having positive attitudes and beliefs about aging is not directly associated with older adults in good health. People develop attitudes and beliefs about aging many decades before they enter older age, which influences how they approach advancing age.⁷

- **Culture:** Each person is born into a culture which shapes how aging is perceived and experienced.^{1,9} Some cultures value older adults, and others view older adults as a burden. Culture determines how older adults are treated, their role in society, and their overall well-being.



- **Environment:** Where someone lives sets the stage for how they experience health and aging.¹ Environments determine living conditions, social support, economic and employment opportunities, access to health care, transportation availability, food security, and much more. A person who resides in a deprived environment is more likely to experience poor outcomes in older age.

- **Genetics:** The aging process is influenced by genetics, meaning that some genes influence how long a person lives, how cells age, metabolism, disease susceptibility, stress response, hormonal regulation, and repair mechanisms in the body.¹ For example, medical professionals will often ask about family history related to cancer, diabetes, and other diseases. However, research indicates that 75% of health outcomes in older adults are related to factors other than genetics, such as cultural attitudes towards aging.⁷



- **Socioeconomic status:** A person's socioeconomic status has a profound effect on the aging process.¹ In short, people with a higher socioeconomic status typically have better access to health care, reduced prevalence of chronic disease, enhanced living conditions, greater health literacy, and are more likely to engage in preventive health behaviors like exercise. In contrast, people with a lower socioeconomic status experience greater chronic disease burden, delayed access to medical care, financial strain, substandard living conditions, and other factors that make health in older age difficult to achieve.

- **Occupation:** Not only does occupation determine socioeconomic status, but it also plays a role in the type of wear and tear that a person's body experiences.¹ A person with a physically demanding job that includes a lot of repetitive actions, such as an agricultural worker or nurse aide, will likely experience physical deterioration more rapidly than someone with a less physically demanding job. In addition, occupation plays a role in what a person is exposed to over a lifetime (e.g., chemicals, stress, physical hazards). For example, constructor workers or landscapers spend extended time in the sun, which contributes to the development of wrinkles, dark spots, and cancer risk.



How people age is a complex interaction between normal age-related changes, individual health promotion behaviors, and larger forces outside the control of the average individual (e.g., culture or social class). This knowledge is valuable to all adults, especially if they interact with older people in a professional capacity. This knowledge can help avoid inadvertently spreading misinformation about what aging is and what aging is not.

References

1. Bjorklund, B.R. & Earles, J.L. (2020). The journey of adulthood (9th ed.). Pearson.
2. Mayo Clinic Staff. (2024, Nov 1). Aging: What to expect. Mayo Clinic. <https://www.mayoclinic.org/healthy-lifestyle/healthy-aging/in-depth/aging/art-20046070>
3. MedlinePlus. (2023). Aging changes in organs, tissue and cells. National Library of Medicine. <https://medlineplus.gov/ency/article/004012.htm>
4. Strasser, H. (2017). The "art of aging" from an ergonomics viewpoint-Wisdoms on age. Occupational Ergonomics, 13(S1), 1-24. <https://doi.org/10.3233/OER-170250>
5. Tornstam, L. (2005) Gerotranscendence: A developmental theory of positive aging. Springer Publishing Company.
6. Erikson, E.H. & Erikson, J.M. (1997). The Life Cycle Completed. W.W. Norton & Company, Inc.
7. Levy, B. (2022). Breaking the age code: How your beliefs about aging determine how long & well you live. HarpersCollins Books.
8. Nakamura, J. S., Hong, J. H., Smith, J., Chopik, W. J., Chen, Y., VanderWeele, T. J., & Kim, E. S. (2022). Associations between satisfaction with aging and health and well-being outcomes among older US adults. JAMA Network Open, 5(2), e2147797-e2147797. doi: <https://doi.org/10.1001/jamanetworkopen.2021.47797>.
9. O'Brien, E. L., Hess, T. M., Kornadt, A. E., Rothermund, K., Fung, H., & Voss, P. (2017). Context influences on the subjective experience of aging: The impact of culture and domains of functioning. The Gerontologist, 57(suppl_2), S127-S137. <https://doi.org/10.1093/geront/gnx015>



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