# Aging with Grace

"Aging with Grace" is a book by David Snowdon. The book describe his study of successful aging among a group of nuns, which has been one of the most influential longitudinal studies on aging.

## Prologue, Ch. 1 The Road to Good Counsel Hill, Ch. 2 The Last Nun Standing

Warm-up

What is the primary focus of "Aging with Grace"?

A study on the aging process in a group of nuns

 The impact of modern technology on aging

The history of geriatric medicine

Exercise routines for the elderly

David Snowdon's research, as discussed in "Aging with Grace", is notable for its use of a unique population. What is this group?
A. Retired athletes
B. School teachers
C. Nuns from the School Sisters of Notre Dame
D. Centenarians in a remote village

What significant aspect of the participants' lives does Snowdon examine in his study on aging?
A. Their genetic backgrounds
B. Their dietary habits
C. Their autobiographical essays
D. Their physical exercise routines

In "Aging with Grace", how does Snowdon address the relationship between education and Alzheimer's disease?
A. He suggests that higher education has no impact on Alzheimer's risk
B. He argues that higher education level is positively correlated with a higher risk of Alzheimer's
C. He explores the idea that education and lifelong learning may help delay the onset of Alzheimer's
D. He dismisses education as a significant factor in Alzheimer's disease

What does Snowdon propose as a significant factor in healthy aging, as presented in "Aging with Grace"?
A. Strict dietary regulations
B. High levels of physical activity
C. A positive and optimistic outlook on life
D. Living in a communal setting

"Aging with Grace" discusses the Nun Study. What is a notable methodological aspect of this study?
A. The use of a double-blind placebo control
B. Longitudinal study spanning several decades
C. Cross-sectional analysis of different age groups
D. Randomized controlled trials

### Learning Outcomes:

* Understand how research is conducted in adulthood and aging
* Appreciate committed Catholic life
* Consider what these lives tell us about life and aging with grace “That You May Have Life to the Full

What were your initial perceptions about nuns? As you read about Nun’s and their lifestyles? What do you find interesting? What surprises you?

Development often involves “other worlds” that require phenomenological investigation to develop insights. Alzheimer’s patients and older adults sometimes experience “other worlds” of experience. What in these chapters encourage you to be more sensitive to other worlds?

What is the psychological experience of losing your memory like?

What does this study tell us about research methods in adult development and aging?

Why was David Snowden interested in studying this special population of Nuns?

Similar lifestyles… healthcare, SES, no alcohol, no smoking,celibacy, religion, schedules, regions, diet, gender,

Records

Why did Sister Carmen agree to help Snowden? What was Sister Carmen’s request? What do you think about this request? What do these lives and stories teach us so that we “may have life to the full”?

What is epidemiology? How did Snowden become interested in it?

## Aging with Grace, Ch. 3 Gray Matters

### Learning Objectives:

* Understand some of the risk factors for Alzheimer’s
* Appreciate how individuals are often more present than we presume p. 58

Which of the following is a significant risk factor for the development of Alzheimer's disease?

Regular physical exercise

Low blood pressure

History of severe head injury

High fruit and vegetable intake

What are the risk factors for Alzheimer’s disease?

Age: The primary risk factor for Alzheimer’s is aging. The likelihood of developing Alzheimer’s increases significantly as one grows older, particularly after the age of 65.

Genetics: Family history plays a role. Those with a parent or sibling with Alzheimer’s are more likely to develop the disease. Specific genes like APOE ε4 allele have been linked to an increased risk.

Cardiovascular Health: Factors that increase cardiovascular risk – like high blood pressure, high cholesterol, and diabetes – are also risk factors for Alzheimer's. These conditions can affect the brain’s blood vessels, leading to vascular dementia or influencing the progression of Alzheimer’s disease.

Head Injury: There is evidence suggesting that a history of severe head injury, especially if it involved loss of consciousness, might be linked to a higher risk of Alzheimer’s later in life.

Lifestyle Factors: Factors such as smoking, obesity, lack of exercise, poor diet, and limited social engagement and intellectual stimulation have been associated with an increased risk of Alzheimer's disease.

Education and Cognitive Engagement: Some studies indicate that lower levels of education and less participation in mentally stimulating activities may be risk factors for Alzheimer's disease.

Other Health Conditions: Depression, sleep disturbances, and chronic stress are also considered potential risk factors for Alzheimer's disease.

Gender and Ethnicity: Women are more likely to develop Alzheimer's than men. Additionally, certain ethnicities, like African Americans and Hispanics, are at a higher risk compared to Caucasians.

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Some Questions to Consider:

1. How did the Nun’s generally respond when Dr. Snowden asked for the School Sisters of Notre Dame to donate their brains?
2. What are the most pathological characteristics of Alzheimer’s Disease physiologically? (Consider what Alois Alzheimer observed in 1901)
3. What are some of the risk factors for Alzheimer’s Disease discussed in these chapters?



The defining pathological hallmarks of Alzheimer disease-

At the gross anatomical level, the disease is characterized by brain atrophy associated with loss of synapses and neurons. At the microscopic level, deposition of extracellular amyloid-β plaques and intraneuronal neurofibrillary tangles is observed, in association with dystrophic neurites and loss of synapses, as well as microgliosis and astrogliosis.

## Aging with Grace, Ch. 4 The Greatest Gift

Desires to help others overcame their doubts. p. 55

Perfect love casteth out all fear Mor 8:16; There is no fear in love 1 John 4:18

## Aging with Grace, Ch. 5 A Tale of Two Sisters

Sister Maria- Tuberculosis, illnesses, depression, “nervous breakdowns” childhood trauma

Sister Dolores- becomes a principal, then has educational opportunities, B.S., Master, Masters, and Ph.D. , more meaningful opportunities and life goals (Africa)

## Aging with Grace, Ch. 6 Amazing Brains

### Learning Objectives:

* Appreciate for the complexity of the brain and our embodied nervous systems
* Understand and identify the various symptoms of cognitive function

Dementia refers to “out of mind” and is the broader category, AD is a particular kind of dementia

1. STM impaired
2. Other cognitive deficits
3. Activities of Daily Living (ADLs) affected

Pathology alone can mislead… ⅓ are escapees

Not reify these labels

## Aging with Grace, Ch. 7 One with the Words

“Read to your children”

### Learning Objectives:

* Understand idea density as a predictor for Alzheimer’s Disease
* Commit to providing rich educational experiences to our children, especially by reading to your children

Idea density v grammatical complexity

## Aging with Grace, Ch. 8 Family Ties

“What difference would it make if you knew?” - Dr. Piero

### Learning Objectives:

* Understand the genetic predictors of Alzheimer’s Disease
* Understand the competing theories for Alzheimer’s Disease

Drugs discussed on p. 123- We have not had a new drug for AD approved by the FDA since 2003 despite billions of dollars

APOE-4 genes almost always manifest disease by age 90

One improvement has been biological markers of AD

Diagnosis has also improved with PET scans that can light up the Tau Tangle and Beta-amyloid proteins as well as improvements with the effectiveness of spinal taps diagnosis

## Aging with Grace Ch. 9 The Heart of the Matter

“While we don't yet know how to prevent the plaques and Tangles of Alzheimer's disease, we do have effective strategies for reducing the risk of stroke.”- Snowden, p. 156

### Learning Objectives:

* Understand the relationship between cardiovascular health and dementia
* Consider some of the tests and measures of cognitive functioning

AD brain- symptoms 93% when stroke-related damage

AD brain- symptoms 57% when no stroke-related damage

Fortunately we know what can reduce the risks of stroke:

Lower your blood pressure, exercise, eating vegetables, cholesterol, weight loss, diabetes, no smoking, etc.

Page 144… Mini-MSE (Mental Status Exam)

Page 145… Boston Naming, Object Naming, Verbal Fluency, Constructional Praxis, Word List Memory, Delayed Word Recall

Page 146… Word Recognition

Exercise and longevity… 1 minute of exercise is associated with 7 minutes of longevity

Link to an article about [leisure time physical activity](https://pubmed.ncbi.nlm.nih.gov/23139642/)

## Aging with Grace, Ch. 10 Our Daily Bread

“Take your vitamins!” - Russell M. Nelson

### Learning Objectives:

* Consider the importance of diet and company for healthy aging
* Consider the difficulty of studying nutrition

Notes:

* The psychology and health benefits of community and eating together
* Our social networks improve our health (e.g., the Hispanic paradox) (also see p. 202) How many of us are held so securely throughout life?
* Cohen et al. research on cold viruses shows that social support mitigated symptoms
* Folic acid research may have benefits for mild cognitive impairments; it’s relationship with dementia and Alzheimer’s has been inconclusive
* Lycopene (p. 172) may be related to physical longevity

## Aging with Grace, Ch. 11 Up and Grateful

Proverbs 17:22 “A cheerful heart is good medicine, but a crushed spirit dries up the bones”

“We want to have a future filled with hope.”- p. 198

Appreciate the power of hope as well as respect the dire consequences of hopelessness and consider the physiological consequences of both in our lives

* The average age of death seems to be affected by emotional content of these spiritual autobiographies at age 22! (p.193) 86.8 average age of negative emotions group, 90.0 neutral group, 93.5 average age for the positive emotions group
* What does this suggest about gratitude journaling?
* The research studied positive, negative, and neutral emotional expression.
* There are important themes in this chapter related to optimism, idealism, faith, hope
* “Sister Genevieve was no Pollyanna.” (p. 192) Genevieve acknowledged the realisms and sufferings inherent in life
* In Faith is Not Blind, the Hafens they discuss stages of faith that are useful to consider in terms of idealism, realism, and idealism amid the realism; (Or in their words) Simplicity, Complexity, Simplicity beyond Complexity
* In The God that Weeps, the Hafens describe the need for idealism amid realism; there is reason to doubt, but there is reason to choose to believe
* In The Anatomy of Hope, Jerome Groopmam describes hope as an optimism amid realism
* When considering the way in which faith affects our bodies, consider how our bodies manufacture potential pain-relieving inner pharmacies involving endorphins, substance P and other: Endorphine from “endo” and “morphine” means literally natural morphine
* James 5:14-15 “Is any sick among you? let him call for the elders of the church; and let them pray over him, anointing him with oil in the name of the Lord: And the prayer of faith will save the sick, and the Lord will raise him up.”
* Placebo effects and nocebo effects are not all in your head; Harry Beecher (1955) demonstrated physical changes in the body due to placebo. We have inner pharmacies.
* “Basic emotions have specific impacts on the autonomic nervous system” (p. 186)

## Aging with Grace, Ch. 12 The Hundred Year Marathon

“I only retire at night.” -Sister Mary

“I’m too busy to be in a study about old people.” - Sister Esther, age 92, teaching religious education at the time. Retired at 97 and finally joined the study :)

* Almost everyone’s hearing is compromised by one hundred, and no one gets to 100 with 20/20 vision; however, the mind has a unique calendar
* Those who get to their nineties have often been healthier; in some ways, “the older you are the healthier you’ve been.” -Perls
* We make each other healthier (see p. 202)
* The power and importance of community- “How many of us are held so securely throughout life?”
* Emotional support could slow the development of disabilities while physical support, especially when the person is capable, could make it worse!

What follow-up questions do you/we have for Dr. David Snowden?

Read this online at <https://books.byui.edu/Adult_development/week_3AXPcGhTSy>