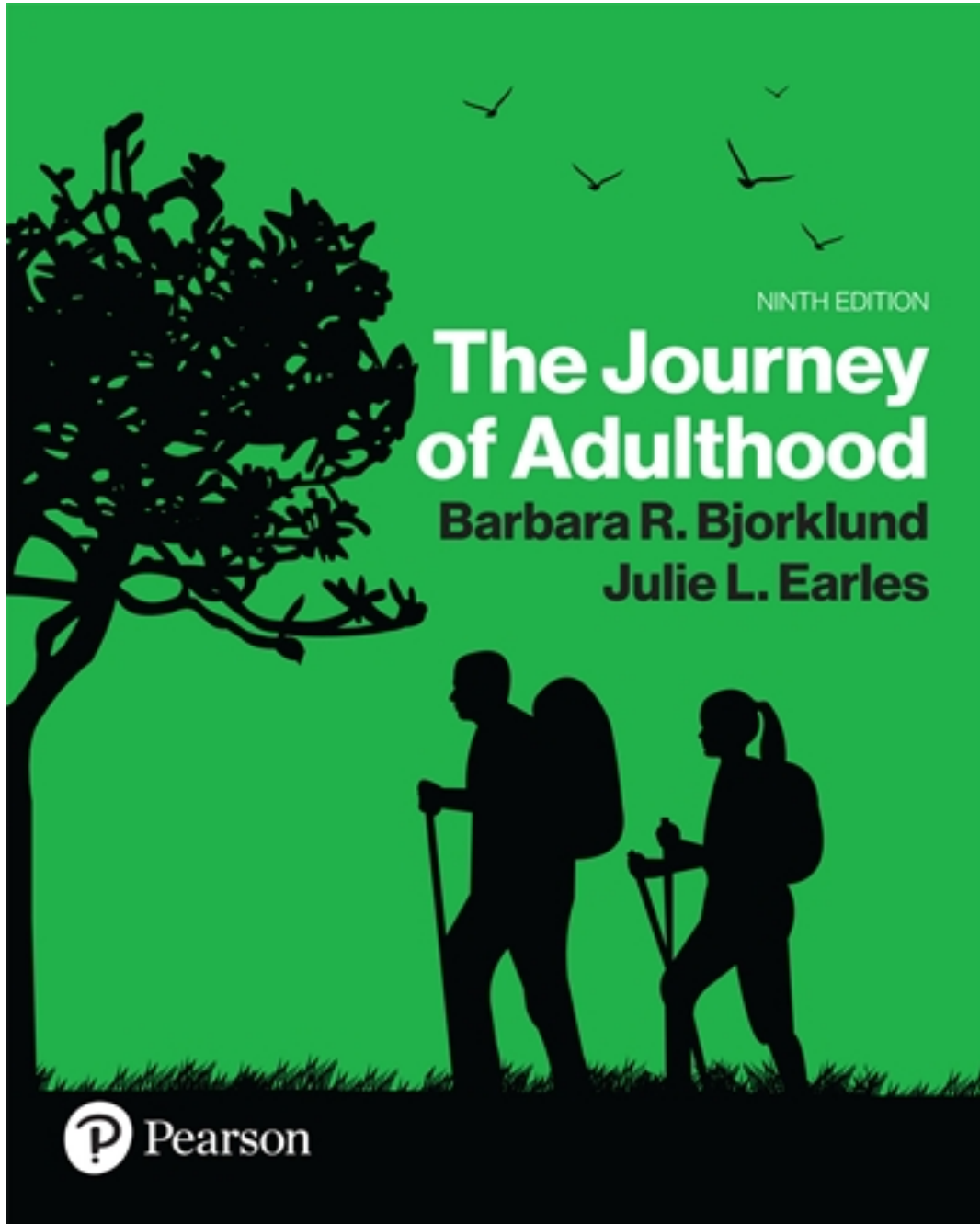


# Test Bank for Journey of Adulthood 9th Edition by Bjorklund

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# Test Bank

# Bjorklund\_TB\_Ch2

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## Multiple Choice Single Select

### M/C Question 1

Which theory of aging focuses on changes at the cellular level, including the release of free radicals?

- a) Oxidative damage
- b) Genetic limits

Consider This: This theory suggests that as we age, our resistance to environmental effects diminishes.

LO 2.1.1: Explain the idea that cell damage causes aging

- c) Caloric restriction

Consider This: This theory suggests that as we age, our resistance to environmental effects diminishes.

LO 2.1.1: Explain the idea that cell damage causes aging

- d) Interactionist view

Consider This: This theory suggests that as we age, our resistance to environmental effects diminishes.

LO 2.1.1: Explain the idea that cell damage causes aging

**ANS: a**

Skill=Understand the Concepts, Objective=LO 2.1: Evaluate theories of primary aging; Submodule LO 2.1.1: Explain the idea that cell damage causes aging, Topic=Theories of Primary Aging, Difficulty=Easy

### M/C Question 2

Which theory of aging is centered on the idea that each species has a maximum life span?

- a) Oxidative damage

Consider This: This theory suggests that aging is imbedded within each of us.

LO 2.1.2: Describe how genetics influences aging

- b) Genetic limits

- c) Caloric restriction

Consider This: This theory suggests that aging is imbedded within each of us.

LO 2.1.2: Describe how genetics influences aging

- d) Interactionist view

Consider This: This theory suggests that aging is imbedded within each of us.

LO 2.1.2: Describe how genetics influences aging

**ANS: b**

Skill=Understand the Concepts, Objective=LO 2.1: Evaluate theories of primary aging; Submodule LO 2.1.2: Describe how genetics influences aging, Topic=Theories of Primary Aging, Difficulty=Easy

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**M/C Question 3**

What is true about adults in their 40s and 50s in terms of obesity?

- a) They are twice as likely to be obese than other age groups.  
Consider This: As people age, they may become more sedentary.  
LO 2.2.1: Outline changes to body composition over time
- b) They are slightly more likely to be obese than other age groups.
- c) They are half as likely to be obese than other age groups.  
Consider This: As people age, they may become more sedentary.  
LO 2.2.1: Outline changes to body composition over time
- d) They are rarely obese compared to other age groups.  
Consider This: As people age, they may become more sedentary.  
LO 2.2.1: Outline changes to body composition over time

**ANS: b**

Skill=Understand the Concepts, Objective=LO 2.2: Analyze how adults deal with age-related changes in appearance; Submodule LO 2.2.1: Outline changes to body composition over time, Topic=Physical Changes in Outward Appearance, Difficulty=Easy

**M/C Question 4**

Which sense develops latest in infants and is the first to show decline as we age?

- a) Touch  
Consider This: This is the most complex of the senses.  
LO 2.3.1: Describe age-related vision changes
- b) Smell  
Consider This: This is the most complex of the senses.  
LO 2.3.1: Describe age-related vision changes
- c) Hearing  
Consider This: This is the most complex of the senses.  
LO 2.3.1: Describe age-related vision changes
- d) Vision

**ANS: d**

Skill=Understand the Concepts, Objective=LO 2.3: Summarize how the senses change with age; Submodule LO 2.3.1: Describe age-related vision changes, Topic=The Changing Senses, Difficulty=Easy

**M/C Question 5**

At what age do most athletic abilities peak?

- a) 20s
- b) 30s  
Consider This: Most prime athletes are young and around college age.  
LO 2.5.1: Summarize how athletic abilities change with age
- c) 40s  
Consider This: Most prime athletes are young and around college age.  
LO 2.5.1: Summarize how athletic abilities change with age
- d) 50s

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Consider This: Most prime athletes are young and around college age.

LO 2.5.1: Summarize how athletic abilities change with age

**ANS: a**

Skill=Understand the Concepts, Objective=LO 2.5: Determine how age-related physical changes impact life as an older adult; Submodule LO 2.5.1: Summarize how athletic abilities change with age, Topic=Changes in Physical Behavior, Difficulty=Easy

**M/C Question 6**

What is true about the incidence of insomnia as we age?

- a) It decreases for everyone, but even more so for women.

Consider This: Lifestyle and outside factors, such as stress, affect insomnia.

LO 2.5.3: Characterize sleep at different ages

- b) It increases for everyone, but even more so for men.

Consider This: Lifestyle and outside factors, such as stress, affect insomnia.

LO 2.5.3: Characterize sleep at different ages

- c) It increases for everyone, but even more so for women.

- d) It decreases for everyone, but even more so for men.

Consider This: Lifestyle and outside factors, such as stress, affect insomnia.

LO 2.5.3: Characterize sleep at different ages

**ANS: c**

Skill=Understand the Concepts, Objective=LO 2.5: Determine how age-related physical changes impact life as an older adult; Submodule LO 2.5.3: Characterize sleep at different ages, Topic=Changes in Physical Behavior, Difficulty=Easy

**M/C Question 7**

About \_\_\_\_\_ % of facial skin aging and variation of body weight can be attributed to genetics.

- a) 60

- b) 90

Consider This: Genetics has a moderately strong effect on genetics.

LO 2.6.1: Explain the heritability of aging

- c) 40

Consider This: Genetics has a moderately strong effect on genetics.

LO 2.6.1: Explain the heritability of aging

- d) 25

Consider This: Genetics has a moderately strong effect on genetics.

LO 2.6.1: Explain the heritability of aging

**ANS: a**

Skill=Understand the Concepts, Objective=LO 2.6: Relate aging experiences to demographic influences; Submodule LO 2.6.1: Explain the heritability of aging, Topic=Individual Differences in Primary Aging, Difficulty=Easy

**M/C Question 8**

Which of the following is associated with the genetic limits theory of aging?

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a) Free radicals

Consider This: It is the number of divisions a species will undergo before reaching replicative senescence.

LO 2.1.2: Describe how genetics influences aging

b) Hayflick limits

c) Rapamycin

Consider This: It is the number of divisions a species will undergo before reaching replicative senescence.

LO 2.1.2: Describe how genetics influences aging

d) Resveratrol

Consider This: It is the number of divisions a species will undergo before reaching replicative senescence.

LO 2.1.2: Describe how genetics influences aging

**ANS: b**

Skill=Understand the Concepts, Objective=LO 2.1: Evaluate theories of primary aging; Submodule

LO 2.1.2: Describe how genetics influences aging, Topic=Theories of Primary Aging, Difficulty=Easy

**M/C Question 9**

The limited studies on caloric restriction in humans show

a) lower incidence of brain atrophy.

Consider This: Caloric restriction has positive physical benefits, though not necessarily psychological ones.

LO 2.1.3: Explain the relationship between aging and caloric intake

b) increase in sex hormones.

Consider This: Caloric restriction has positive physical benefits, though not necessarily psychological ones.

LO 2.1.3: Explain the relationship between aging and caloric intake

c) increase in heart disease.

Consider This: Caloric restriction has positive physical benefits, though not necessarily psychological ones.

LO 2.1.3: Explain the relationship between aging and caloric intake

d) reduction in cancer deaths.

**ANS: d**

Skill=Understand the Concepts, Objective=LO 2.1: Evaluate theories of primary aging; Submodule LO

2.1.3: Explain the relationship between aging and caloric intake, Topic=Theories of Primary Aging, Difficulty=Easy

**M/C Question 10**

What age group is most likely to have plastic surgery?

a) 13-19 years

Consider this: The age group probably reflects the intersection of declining age and increasing income.

LO 2.2.2: Characterize how skin changes with age

b) 20-29 years

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Consider this: The age group probably reflects the intersection of declining age and increasing income.

LO 2.2.2: Characterize how skin changes with age

- c) 30-39 years

Consider this: The age group probably reflects the intersection of declining age and increasing income.

LO 2.2.2: Characterize how skin changes with age

- d) 40-54 years

**ANS: d**

Skill=Understand the Concepts, Objective=2.2: Analyze how adults deal with age-related changes in appearance; Submodule LO 2.2.2: Characterize how skin changes with age, Topic=Physical Changes in Outward Appearance, Difficulty=Easy

**M/C Question 11**

Hearing loss rates have declines in recent years. This is likely due to

- a) a reduction in workplace noise.

- b) improved hearing aid technology.

Consider This: The U.S. Bureau of Labor regulates this.

LO 2.3.2: Relate hearing to the experience of aging

- c) better preventative care.

Consider This: The U.S. Bureau of Labor regulates this.

LO 2.3.2: Relate hearing to the experience of aging

- d) cochlear implants.

Consider This: The U.S. Bureau of Labor regulates this.

LO 2.3.2: Relate hearing to the experience of aging

**ANS: a**

Skill=Understand the Concepts, Objective=2.3: Summarize how the senses change with age; Submodule LO 2.3.2: Relate hearing to the experience of aging, Topic=The Changing Senses, Difficulty=Easy

**M/C Question 12**

Teri is 61 years old and has developed an autoimmune disorder. This is most likely due to

- a) the reduced ability of T cells to fight infection.

Consider This: Antibody production is also implicated in autoimmune disorder.

LO: 2.4.4: Summarize age-related changes to the immune system

- b) a process of primary aging.

Consider This: Antibody production is also implicated in autoimmune disorder.

LO: 2.4.4: Summarize age-related changes to the immune system

- c) abnormalities in B cells that occur with age.

- d) a lack of vitamin supplements.

Consider This: Antibody production is also implicated in autoimmune disorder.

LO: 2.4.4: Summarize age-related changes to the immune system

**ANS: c**

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Skill=Apply What You Know, Objective=2.4: Analyze the social impact of age-related changes to the body; Submodule LO 2.4.4: Summarize age-related changes to the immune system, Topic=How Age Changes Internal Structures and Systems, Difficulty=Moderate

**M/C Question 13**

Dr. King is examining whether running has an effect on telomeres. Dr. King is working under which theory?

a) Genetic limits

b) Oxidative damage

Consider This: This theory focuses on whether programmed aging can be altered.

LO 2.1: Evaluate theories of primary aging

c) Caloric restriction

Consider This: This theory focuses on whether programmed aging can be altered.

LO 2.1: Evaluate theories of primary aging

d) Interactionist view

Consider This: This theory focuses on whether programmed aging can be altered.

LO 2.1: Evaluate theories of primary aging

**ANS: a**

Skill=Apply What You Know, Objective=LO 2.1: Evaluate theories of primary aging; Submodule LO 2.1.1: Explain the idea that cell damage causes aging, Topic=Theories of Primary Aging, Difficulty=Moderate

**M/C Question 14**

Margaret undergoes a DXA scan and discovers her bones have rapidly become less dense since she turned 55. Margaret has

a) osteoarthritis.

Consider This: This condition affects women much more than men because women's bones are smaller.

LO 2.4.1: Determine the impacts of age-related bone and muscle changes

b) BMD.

Consider This: This condition affects women much more than men because women's bones are smaller.

LO 2.4.1: Determine the impacts of age-related bone and muscle changes

c) osteoporosis.

d) scoliosis.

Consider This: This condition affects women much more than men because women's bones are smaller.

LO 2.4.1: Determine the impacts of age-related bone and muscle changes

**ANS: c**

Skill=Apply What You Know, Objective=LO 2.4: Analyze the social impact of age-related changes to the body; Submodule LO 2.4.1: Determine the impacts of age-related bone and muscle changes, Topic=How Age Changes Internal Structures and Systems, Difficulty=Moderate

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**M/C Question 15**

On a day-to-day basis, how does the heart of an older person compare to one of a younger person?

- a) The heart of the older person works slower than the younger person.  
Consider This: Disease is what affects the functioning of the heart for typical activities.  
LO 2.4.2: Explain how the cardiovascular and respiratory systems change with age
- b) They both work just about the same.
- c) The heart of the older person works faster than the younger person.  
Consider This: Disease is what affects the functioning of the heart for typical activities.  
LO 2.4.2: Explain how the cardiovascular and respiratory systems change with age
- d) The heart of the older person has more plaque than the younger person.  
Consider This: Disease is what affects the functioning of the heart for typical activities.  
LO 2.4.2: Explain how the cardiovascular and respiratory systems change with age

**ANS: b**

Skill=Analyze It, Objective=LO 2.4: Analyze the social impact of age-related changes to the body;  
Submodule LO 2.4.2: Explain how the cardiovascular and respiratory systems change with age,  
Topic=How Age Changes Internal Structures and Systems, Difficulty=Moderate

**M/C Question 16**

A study reveals that Mark's brain at age 70 is experiencing both changes in neurons and also some pruning of neurons. These are both examples of the brain's

- a) myelin.  
Consider This: The brain is not a rigid organ.  
LO 2.4.3: Identify age-related changes to the nervous system
- b) neurogenesis.  
Consider This: The brain is not a rigid organ.  
LO 2.4.3: Identify age-related changes to the nervous system
- c) stem cells.  
Consider This: The brain is not a rigid organ.  
LO 2.4.3: Identify age-related changes to the nervous system
- d) plasticity.

**ANS: d**

Skill=Apply What You Know, Objective=LO 2.4: Analyze the social impact of age-related changes to the body; Submodule LO 2.4.3: Identify age-related changes to the nervous system, Topic=How Age Changes Internal Structures and Systems, Difficulty=Moderate

**M/C Question 17**

Thomas has always played tennis, but now that he is in his 60s, he finds he has more trouble following the ball and connecting his racquet with it. Thomas is experiencing a loss of

- a) density.  
Consider This: Arthritic changes in the joints affect this ability.  
LO 2.5.2 Identify age-related challenges in personal stamina, dexterity, and balance
- b) stamina.  
Consider This: Arthritic changes in the joints affect this ability.  
LO 2.5.2 Identify age-related challenges in personal stamina, dexterity, and balance



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c) balance.

Consider This: Arthritic changes in the joints affect this ability.

LO 2.5.2 Identify age-related challenges in personal stamina, dexterity, and balance

d) dexterity.

**ANS: d**

Skill=Apply What You Know, Objective=LO 2.5 Determine how age-related physical changes impact life as an older adult; Submodule LO 2.5.2: Identify age-related challenges in personal stamina, dexterity, and balance, Topic=Changes in Physical Behavior, Difficulty=Moderate

**M/C Question 18**

Cho, a 51-year-old woman, is complaining of insomnia. She says she has trouble getting to sleep because her temperature is off, and when she does fall asleep, her partner says she snores loudly. Cho is likely experiencing insomnia as a result of

a) stress.

Consider This: This affects women only.

LO 2.5.3: Characterize sleep at different ages

b) menopause.

c) lifestyle factors.

Consider This: This affects women only.

LO 2.5.3: Characterize sleep at different ages

d) genetic disposition.

Consider This: This affects women only.

LO 2.5.3: Characterize sleep at different ages

**ANS: b**

Skill=Analyze It, Objective=LO 2.5: Determine how age-related physical changes impact life as an older adult; Submodule LO 2.5.3: Characterize sleep at different ages, Topic=Changes in Physical Behavior, Difficulty=Moderate

**M/C Question 19**

Differences in sexual desire between young adults and middle-aged adults appear to be related to

a) exercise.

Consider This: This is a major form of stress for young adults that decreases as we move into middle-age.

LO 2.5.4: Describe changes and continuities in sexual activity with age

b) income.

Consider This: This is a major form of stress for young adults that decreases as we move into middle-age.

LO 2.5.4: Describe changes and continuities in sexual activity with age

c) parenthood.

d) diet.

Consider This: This is a major form of stress for young adults that decreases as we move into middle-age.

LO 2.5.4: Describe changes and continuities in sexual activity with age

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**ANS: c**

Skill=Analyze It, Objective=LO 2.5: Determine how age-related physical changes impact life as an older adult; Submodule LO 2.5.4: Describe changes and continuities in sexual activity with age, Topic=Changes in Physical Behavior, Difficulty=Moderate

**M/C Question 20**

Alana and Amber are identical twins in their 60s. Alana looks much older than Amber; what is likely to be true?

- a) Alana has an inherited disease that has aged her faster than Amber.  
Consider This: Lifestyle factors affect the aging process.  
LO 2.6.2: Relate lifestyle to how a person ages
- b) Alana has more genetic predisposition for aging than Amber.  
Consider This: Lifestyle factors affect the aging process.  
LO 2.6.2: Relate lifestyle to how a person ages
- c) Alana has a more sedentary lifestyle than Amber.
- d) Alana has avoided UV exposure more than Amber.  
Consider This: Lifestyle factors affect the aging process.  
LO 2.6.2: Relate lifestyle to how a person ages

**ANS: c**

Skill=Analyze It, Objective=LO 2.6: Relate aging experiences to demographic influences; Submodule LO 2.6.2: Relate lifestyle to how a person ages, Topic=Individual Differences in Primary Aging, Difficulty=Moderate

**M/C Question 21**

What is an example of a food desert?

- a) A middle-class neighborhood with one grocery store  
Consider This: Some areas experience a dearth of healthy food options.  
LO 2.6.3: Describe racial and socioeconomic impacts on the experience of aging
- b) A low-income neighborhood with many people on government aid  
Consider This: Some areas experience a dearth of healthy food options.  
LO 2.6.3: Describe racial and socioeconomic impacts on the experience of aging
- c) A high-income neighborhood with expensive health food stores  
Consider This: Some areas experience a dearth of healthy food options.  
LO 2.6.3: Describe racial and socioeconomic impacts on the experience of aging
- d) A low-income neighborhood with many convenience stores

**ANS: d**

Skill=Apply What You Know, Objective=LO 2.6: Relate aging experiences to demographic influences; Submodule LO 2.6.3: Describe racial and socioeconomic impacts on the experience of aging, Topic=Individual Differences in Primary Aging, Difficulty=Moderate

**M/C Question 22**

Mara is menopausal and considering hormone replacement therapy (HRT). Which of the following is accurate advice for Mara?

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- a) Exercise and yoga may be more effective for alleviating hot flashes.  
Consider This: No form of HRT is a “fountain of youth.”  
LO 2.4.5: Differentiate how hormone changes affect males and females
- b) HRT will not reverse aging, but may alleviate some symptoms.
- c) HRT may decrease risk of some cancers.  
Consider This: No form of HRT is a “fountain of youth.”  
LO 2.4.5: Differentiate how hormone changes affect males and females
- d) Replacing estrogen can provide protection against disease.  
Consider This: No form of HRT is a “fountain of youth.”  
LO 2.4.5: Differentiate how hormone changes affect males and females

**ANS: b**

Skill=Apply What You Know, Objective=LO 2.4: Analyze the social impact of age-related changes to the body; Submodule LO 2.4.5: Differentiate how hormone changes affect males and females, Topic=How Age Changes Internal Structures and Systems, Difficulty=Easy

**M/C Question 23**

Carl is 72-years-old, has been a lifelong smoker, and lived in urban areas for most of his life. Compared to his 23-year-old granddaughter, what is most likely to be true about Carl?

- a) He prefers salsa to ketchup on his food.  
Consider This: Diseases and medication may also have this effect.  
LO 2.3.3: Explain how taste and smell change with age
- b) He is overly sensitive to certain smells.  
Consider This: Diseases and medication may also have this effect.  
LO 2.3.3: Explain how taste and smell change with age
- c) He has about half as many taste receptors.
- d) He tends to overeat.  
Consider This: Diseases and medication may also have this effect.  
LO 2.3.3: Explain how taste and smell change with age

**ANS: c**

Skill=Apply What You Know, Objective=LO 2.3: Summarize how the senses change with age; Submodule 2.3.3: Explain how taste and smell change with age, Topic=The Changing Senses, Difficulty=Easy

**M/C Question 24**

Marilisa, a 70-year-old woman, reports a lack of sexual activity. What is the top reason for her lack of sexuality?

- a) Lack of a partner
- b) Decreased desire  
Consider This: Mortality also increases as we age.  
LO 2.5.4: Describe changes and continuities in sexual activity with age
- c) Hormonal changes  
Consider This: Mortality also increases as we age.  
LO 2.5.4: Describe changes and continuities in sexual activity with age
- d) Painful intercourse

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Consider This: Mortality also increases as we age.

LO 2.5.4: Describe changes and continuities in sexual activity with age

**ANS: a**

Skill=Analyze It, Objective=LO 2.5: Determine how age-related physical changes impact life as an older adult; Submodule LO 2.5.4: Describe changes and continuities in sexual activity with age, Topic=Changes in Physical Behavior, Difficulty=Moderate

**M/C Question 25**

Spector (2008) found that longer telomere length was associated with

- a) sedentary lifestyle.

Consider This: Shorter telomere length is predictive of premature aging.

LO 2.1.2: Describe how genetics influences aging

- b) work-related exercise.

Consider This: Shorter telomere length is predictive of premature aging.

LO 2.1.2: Describe how genetics influences aging.

- c) leisure-time exercise.

- d) antioxidants.

Consider This: Shorter telomere length is predictive of premature aging.

LO 2.1.2: Describe how genetics influences aging

**ANS: c**

Skill=Apply What You Know, Objective=LO 2.1: Evaluate theories of primary aging; Submodule LO 2.1.2: Describe how genetics influences aging, Topic=Theories of Primary Aging, Difficulty=Moderate

**Essay**

**SA Question 26**

Compare and contrast the three theories of primary aging, noting each one's advantages and limitations.

Skill=Analyze It, Objective=LO 2.1: Evaluate theories of primary aging, Topic=Theories of Primary Aging, Difficulty=Moderate

**SA Question 27**

Analyze how people age in terms of bones and muscles, cardiovascular and respiratory systems, and the brain and nervous system. How do these systems compare to those of younger adults?

Skill=Analyze It, Objective=LO 2.4: Analyze the social impact of age-related changes to the body, Topic=Physical Changes During Adulthood, Difficulty=Moderate

**SA Question 28**

Distinguish how younger adults and older adults differ in terms of athletic abilities, sleep, and sexual functioning.

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Skill=Analyze It, Objective=LO 2.5: Determine how age-related physical changes impact life as an older adult, Topic=Changes in Physical Behavior, Difficulty=Moderate

### **SA Question 29**

Compare and contrast the genetics effect and lifestyle effects on individual aging processes.

Skill=Analyze It, Objective=LO 2.6.1: Explain the heritability of aging; 2.6.2: Relate lifestyle to how a person ages, Topic=Individual Differences in Primary Aging, Difficulty=Moderate

### **SA Question 30**

Analyze the relationship of physical changes to age. When do these physical changes become most apparent, and why?

Skill=Analyze It, Objective=2.5: Determine how age-related physical changes impact life as an older adult, Topic=Changes in Physical Behavior, Difficulty=Moderate

### **Essay Question 31**

Pick two of the three theories of primary aging and analyze its impact on Americans. How can these theories guide people's fight against aging? Which one do you think is the most useful, and why?

Skill=Analyze It, Objective=LO 2.1: Evaluate theories of primary aging, Topic=Theories of Primary Aging, Difficulty=Difficult

### **Essay Question 32**

Assume you have a Great Aunt Lois. Using the seven physical systems of change that older adults experience (Table 2.1), apply these to your great aunt. How has she aged, what changes has she experienced, and what can she do now, at age 85, to help decrease the physical changes of aging?

Skill=Apply What You Know, Objective=2.5: Determine how age-related physical changes impact life as an older adult, Topic=Physical Changes in Outward Appearance, Difficulty=Moderate

### **Essay Question 33**

Evaluate the causes that create changes in physical behavior, such as athletic abilities, sleep, and sexual functioning. What causes are most influential, and what are strategies people can adopt to decrease these changes? How do you think these changes affect people's morale, and why?

Skill=Evaluate It, Objective=LO 2.5: Determine how age-related physical changes impact life as an older adult, Topic=Changes in Physical Behavior, Difficulty=Difficult

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**Essay Question 34**

Critique the statement that aging is genetically determined. How important are race and socioeconomic factors in influencing lifestyle and genetic factors for individual aging, and why?

Skill=Evaluate It, Objective 2.6.3: Describe racial and socioeconomic impacts on the experience of aging, Topic=Individual Differences in Primary Aging, Difficulty=Difficult

**Essay Question 35**

Criticize commercials' claims that their products can reverse the signs of aging. What does research suggest? What do you think would be the most effective ways to delay aging, and why?

Skill=Evaluate It, Objective=LO 2.1: Evaluate theories of primary aging, Topic=Theories of Primary Aging, Difficulty=Difficult

# Chapter 2: Physical Changes

## Chapter Context

The theme of this chapter is primary aging, the physical changes that take place predictably in most of us when we reach certain milestones in our journeys of adulthood. Basic theories are introduced, as well as age-related physical changes. Finally, areas of more complex functioning are covered, such as (1) athletic abilities; (2) stamina, dexterity, and balance; (3) sleep; and (4) sexual activity, all of which decline gradually with age.

## Outcome-based Outline

Outcome	Learning Objectives	Submodule Learning Objectives
Knowledge of Discipline	2.1: Evaluate theories of primary aging	2.1.1: Explain the idea that cell damage causes aging
		2.1.2: Describe how genetics influences aging
		2.1.3: Explain the relationship between aging and caloric intake
		2.1.4: Identify challenges in prolonging human life
	2.3: Summarize how the senses change with age	2.3.1: Describe age-related vision changes
		2.3.2: Relate hearing to the experience of aging
		2.3.3: Explain how taste and smell change with age
Cultural Competence	2.4: Analyze the social impact of age-related changes to the body	2.4.1: Determine the impacts of age-related bone and muscle changes
		2.4.2: Explain how the cardiovascular and respiratory systems change with age
		2.4.3: Identify age-related changes to the nervous system
		2.4.4: Summarize age-related changes to the immune system
		2.4.5: Differentiate how hormone changes affect males and females
	2.6: Relate aging experiences to demographic influences	2.6.1: Explain the heritability of aging
		2.6.2: Relate lifestyle to how a person ages
		2.6.3: Describe racial and socioeconomic impacts on the experience of aging
Lifelong Learning	2.2: Analyze how adults deal with	2.2.1: Outline changes to body composition

	age-related changes in appearance	over time
		2.2.2: Characterize how skin changes with age
		2.2.3: Describe issues associated with hair and the aging process
	2.5: Determine how age-related physical changes impact life as an older adult	2.5.1: Summarize how athletic abilities change with age
		2.5.2: Identify age-related challenges in personal stamina, dexterity, and balance
		2.5.3: Characterize sleep at different ages
		2.5.4: Describe changes and continuities in sexual activity with age

## Discussion Question Bank

This discussion question bank provides a listing of discussion questions (2-3 per module) which are included for in-class use.

Module	Submodule	Discussion Question(s)
2.1: Evaluate theories of primary aging	2.1.1: Explain the idea that cell damage causes aging	1. What claims have you heard about antioxidants and their ability to fight aging? What ways have you, or others you know, tried to slow down or prolong the lifespan?
	2.1.2: Describe how genetics influences aging	
	2.1.3: Explain the relationship between aging and caloric intake	2. Do you think the costs of caloric restriction outweigh the benefits, as described in the text?
	2.1.4: Identify challenges in prolonging human life	3. If a fountain of youth were available and you could postpone or slow down aging significantly, would you choose to use it or not? How long is an optimal life? 4. Reflecting on your observations, which theory of aging best matches your experience?
2.2: Analyze how adults deal with age-related changes in appearance	2.2.1: Outline changes to body composition over time	5. Based on common physical changes during adulthood, what changes do you expect over the next twenty years? Have you observed these changes in older relatives? 6. Considering the physical changes in adulthood, what advice would you give to a group of 18-22 year-olds about aging?
	2.2.2: Characterize how skin changes with age	
	2.2.3: Describe issues associated with hair and the aging process	
2.3: Summarize how the senses change with age	2.3.1: Describe age-related vision changes	7. Think of your own experiences or that of others whose senses are declining. In what ways do they accommodate



	2.3.2: Relate hearing to the experience of aging	for these declines? What are some additional accommodations that might help them?
	2.3.3: Explain how taste and smell change with age	
2.4: Analyze the social impact of age-related changes to the body	2.4.1: Determine the impacts of age-related bone and muscle changes	8. Which of the physical changes during adulthood aging do you think most impacts life? If you had a magic wand and could preserve one system (senses, bones and muscles, cardiovascular and nervous, immune system, hormonal) which one would you preserve and why? 9. Based on the changes throughout adulthood, at what age would you consider someone over-the-hill physically?
	2.4.2: Explain how the cardiovascular and respiratory systems change with age	
	2.4.3: Identify age-related changes to the nervous system	
	2.4.4: Summarize age-related changes to the immune system	
	2.4.5: Differentiate how hormone changes affect males and females	
2.5: Determine how age-related physical changes impact life as an older adult	2.5.1: Summarize how athletic abilities change with age	10. Considering the changes in physical behavior during adulthood, at what point do you think you will be at your physical best athletically? What, if anything, could you do to prevent the decline in athletic ability? 11. How do your beliefs about sexual behavior in adulthood match the research? What information surprised you the most?
	2.5.2: Identify age-related challenges in personal stamina, dexterity, and balance	
	2.5.3: Characterize sleep at different ages	
	2.5.4: Describe changes and continuities in sexual activity with age	
2.6: Relate aging experiences to demographic influences	2.6.1: Explain the heritability of aging	12. If you know how long your parents, grandparents, and great-grandparents lived, do you see a pattern that could be related to genetics? What lifestyle patterns may also be related? If you don't have that information about family, consider families you are aware of with long and short lifespans and reflect on the impact of genetics and lifestyle? 13. Based on the aging of individuals you have known, how important is genetics? Have you observed similarities among family members?
	2.6.2: Relate lifestyle to how a person ages	
		14. Reflecting on your habits, what lifestyle changes could affect the rate of your primary aging? What makes it difficult to make these changes?

	2.6.3: Describe racial and socioeconomic impacts on the experience of aging	15. Considering the neighborhood you live in and those you travel through, what food options are available? What differences do you see in higher versus lower income neighborhoods?
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## Research Assignments

The following research assignments pertain to the main topics and/or themes of the chapter. Please respond by writing a paper consisting of 1000-1500 words.

### Theories of Aging

Choose one bodily system and describe the most significant physical changes that occur between the ages of eighteen and eighty. Discuss how oxidative damage, genetic limit, and caloric restriction explain the aging to that bodily system. Use 2-3 scholarly sources.

### Turning Back the Clock

Choose one of the innovations for potentially expanding our maximum lifespan, introduced in section 2.1.4 (e.g., lab-grown replacement organs, transfusions of “young” blood, etc.). Do some research on the topic to see what you can learn. Describe the method you chose to investigate and summarize what you’ve found. What studies have been done so far, and what are the results? What is the theory behind the research and/or proposed method (e.g., caloric restriction, genetic limits, something else...)? Is there good evidence that the approach you’ve learned about could one day prolong the lifespan of humans? Provide support for your argument by citing 2-3 scholarly sources.