Stuart, Chapter 4:

Physical Health and Well-Being

What human behaviors affect health (and the aging process)?

- · Diet
- · Over eating
- Smoking
- · Excessive alcohol
- · Drugs
- · Accidents
- Stress
- · Exercise
- · Laughing
- · Staying hydrated

What happens to ones physical body as one ages?

- · Hearing, eyesight, taste, smell: reduced
- · Hair grays and thins
- · Skin loses elasticity (wrinkles)
- Body has more difficulty absorbing vitamins and minerals; calcium
- Wear and tear on joints which can result in Rheumatism and arthritis
- · Organs less efficient (lungs, kidneys)
- Testosterone and estrogen less
- · Body becomes less erect
- Tendency to gain weight in 60s and 70s but then in 80s begins to lose weight

FUN FACTS:

What percentage of the elderly population (60+) lives in a nursing home?

5 to 6 percent

At what age does a person start to notice physical changes associated with their aging?

40 - 45

May need reading glasses, crows feet around the eyes, some graying and thinning of hair

What are the most common causes of death?

- <u>Heart disease</u> (heart attack, arrhythmias, heart failure, stroke, hypertension—high blood pressure)
- Cancer

What do you know about cancer? What behaviors have been associated with cancer? What does cancer love? Accidents are a major cause of deaths.

What would you guess are the causes of the most common accidents?

- <u>Falls</u> (most serious for those with osteoporosis, broken hips)
- · Automobile accidents
- <u>Suffocation</u> by ingestion of food (muscles for swallowing weaker w/age)

Other major causes of death?

Obesity is a major contributor to early deaths.

Why might this be?

- <u>Co-morbidities</u>—multiple health problems
- <u>Coronary heart disease</u>, linked to diabetes and hypertension
- · Depression

Behaviors believed to contribute to cancer:

- · Physical inactivity
- · Obesity
- · Weakened immune system
- · Poor nutrition (cancer loves sugar!)

What is meant by a chronic health condition? What causes/contributes to it?

<u>Chronic condition</u> is long lasting (years such as arthritis). An <u>acute condition</u> is short-term (e.g., the flu)

- · Overeating
- · Smoking
- · Drinking alcohol excessively
- "the life we live now gives shape to the life we will live in our oldest adulthood"

What are some major chronic conditions in old age?

- <u>Arthritis</u>—inflammation or degeneration of a joint
- Hypertension (discussed on following slide)
- Osteoporosis

What do you know about osteoporosis?

Osteoporosis is a thinning of the bones, low density bones

- Lack of <u>calcium</u> in bones, associated with low estrogen (<u>menopause</u> reduces estrogen
- Pregnancy and lactation can pull calcium out of bones that affect the mother later in life while post-menopause lowers estrogen levels
- Osteopenia—early signs of osteoporosis
- Weight bearing <u>exercises</u> can help keep bones strong

Hypertension—high blood pressure

What do you know about hypertension or High blood pressure?

- It is a common condition that affects the body's arteries.
- If you have high blood pressure, the force of the blood pushing against the artery walls is consistently too high. The <u>heart</u> has to work harder to pump blood.

- Uncontrolled hypertension increases the risk of <u>heart</u> attack, heart failure, kidney disease, stroke, and cognitive decline
- <u>Causes</u>: obesity, salt, inactivity, excessive alcohol, too little potassium

"Free radicals" have been associated with the damage/aging of cells that contribute to aging and eventually lead to death.

Has anyone heard of these before?
What do you know about free
radicals?

As cells metabolize or turn food into energy, there are <u>by products</u> in the form of molecules needing an electron.

These molecules, or free radicals, are then found to <u>invade and damage cells</u> by taking an electron from them

This appears to be a normal by-product of cells metabolizing food but over time is harmful and <u>results</u> in the <u>body</u> <u>"aging"</u> (i.e., showing signs such as wrinkled skin, etc.)

The older one is, the more free radicals in the body

Can anything be done to stop or slow down the production of free-radicals?

<u>Antioxidant supplements</u> can help to reduce the number of free-radicals in the body.

Pharmaceuticals are always trying to convince people that they have products that will do this but these are often disproven over time.

<u>For example</u>: DHEA and PBN are mentioned in book as possible reducers of radicals but have since been largely disproven.

Proven Antioxidant supplements:

- · Colorful fruits
- Vegetables
- · Spinach and broccoli
- Red apples and cranberries
- · Blueberries, cherries, grapes
- · Chocolate
- · Red wine

What contributes to a long life? People who live into their 90s and beyond?

- · Exercise
- · Limited meat
- · Vegetables and fruits
- Quite time/meditation to help relieve stresses
- Support from family and loved ones even if sometimes quarrel
- Healthy behaviors/habits
- · Supportive community

What psychological changes occur in "old age?"

Intelligence? Drops but remains in "middle" range until the 80s or older, can avoid drop

by using mind

Memory? Long-term processes continue, short-term affected if rushed

Learning? Appears to be slower, needs more

time

Depression? Increased risk

Sexual activity? Can continue into 90s if healthy

Personality? Old people don't become grouchy,

grouchy people become old 19

Mental health and the elderly.

What <u>roles</u> do people lose as they grow old?

How might <u>role loss</u> affect the older person's self concept or self-image?

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How might role ambiguity be related to older persons?

As roles are lost, some older persons are unsure what to do.

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There are three major theories that attempt to explain the aging process:

Disengagement theory

Activity theory

Continuity theory

What would you guess these are?

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<u>Disengagement Theory</u>: older people naturally disengage from society as they grow older

Activity Theory: older people need to stay active to be happy and healthy as they age.

<u>Continuity Theory</u>: older people want to maintain the same level of activity in old age as when younger to the extent possible.

What are the role expectations of older persons?

What would each theory propose?

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What is role discontinuity?

A lack of preparation for a new role.

Examples: retirement, grandparenthood, institutionalization

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Have older men and women been socialized differently and if so does this continue in old age?

Gender socialization—the ways in which society has set men and women onto different courses in life because they are male or female.

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What would you guess is re-socialization?

Where might it happen?

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Re-Socialization is:

- Learning new norms, values, attitudes, and behaviors
- Adult Re-Socialization (retirement, loss of a spouse)

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What factors may contribute to depression among the elderly?

- <u>Physical conditions</u> like stroke, hypertension, atrial fibrillation, diabetes, cancer, dementia, and chronic pain.
- Certain <u>medicines</u> or combination of medicines can cause depression
- Guilt, unresolved grief
- <u>Social losses</u> (friends/family deaths)/loneliness
- Role loss, Anger

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What does the older person feel when depressed?



- ·Sadness or feelings of despair.
- ·Loss of interest in socializing or hobbies.
- •Unexplained or aggravated aches and pains.
- •Feelings of hopelessness or helplessness.
- ·Lack of motivation and energy.

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What can help an older person overcome depression?

- · Exercise/staying active
- · Staying in touch with others
- · Getting enough sleep
- · Eating healthy meals
- Volunteering, caring for a pet, or finding a good movie/book that makes one laugh (these may be unique to the individual)
- medications

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What do you know about Alzheimer's disease?

- 10% of 65+ and 50% of 85+ may be affected
- Hallucinations
- Loss of intelligence
- Physically damages the brain by causing lesions based on autopsies performed
- Detected by process of elimination

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Is Alzheimer's disease curable?

- There's currently no cure for Alzheimer's
- There are treatments that may change disease progression, and drug and nondrug options that may help treat symptoms
- Aducanumab is a medication that may help to reduce brain lesions associated with Alzheimer's

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The 6 Steps To BOOST BRAIN HEALTH &
Reverse Cognitive DECLINE (16.5 min)
https://www.youtube.com/watch?v=eIW5Ycgdjyo

The SHOCKING ROOT CAUSE Of Alzheimer's &

The DAILY HACKS To Prevent It! (7:40 mins)
https://www.youtube.com/watch?v=4dgwXpoPLog

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Hypertension – High Blood Pressure, Animation (4 min) https://www.youtube.com/watch?v =JtBtk00EiVM

Osteoporosis (5 $\frac{1}{2}$ min)

https://www.youtube.com/watch?v =eYGkT6OrBk0

Free radicals/antioxidants 4 min https://www.youtube.com/watch?v=bmAMtPEv-OM

What makes a good life? Lessons from the longest study on happiness | TED (12 mins)

https://www.youtube.com/watch?v=8KkKuTCFv zI&t=399s

I Was 80 Years Old For A Day (7:40 mins)

https://www.youtube.com/watch?v=nTmDdWS X2mQ

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