

Stuart, Chapter 4:

Physical Health
and Well-Being

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

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

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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

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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

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What are the most common causes of death?

- Heart disease (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?

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Accidents are a major cause of deaths.

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

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

Other major causes of death?

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Obesity is a major contributor to early deaths.

Why might this be?

- Co-morbidities—multiple health problems
- Coronary heart disease, linked to diabetes and hypertension
- Depression

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Behaviors believed to contribute to cancer:

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

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What is meant by a chronic health condition?

What causes/contributes to it?

Chronic condition is long lasting (years such as arthritis). An acute condition 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"

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What are some major chronic conditions in old age?

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

What do you know about osteoporosis?

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Osteoporosis is a thinning of the bones, low density bones

- Lack of calcium in bones, associated with low estrogen (menopause 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 exercises can help keep bones strong

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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 heart has to work harder to pump blood.

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

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"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?

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

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

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

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

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

Antioxidant supplements 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.

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

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Proven Antioxidant supplements:

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

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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

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