

TOPIC: THE AGING PROCESS

1. The aging process is a series of physical, sensory and psychosocial changes that occur over many years.

2. Physical changes occur in all body systems causing body processes to slow down:

- a. Respiratory system - lung capacity decreases as chest wall and lungs become more rigid. Deep breathing is more difficult. Air exchange decreases causing person to breathe faster to get enough air when exercising, ill, or stressed.
- b. Circulatory system – blood vessels become more rigid and narrow. Heart muscle has to work harder which may result in high blood pressure and poor circulation.
- c. Gastrointestinal system - taste buds lose sensitivity causing decreased appetite. Tooth and gum problems result in inability to eat properly. Digestive secretions decrease causing constipation and food intolerance.
- d. Urinary system - kidney function decreases slowing removal of waste. Bladder tone decreases resulting in more frequent urination, incontinence, bladder infections and urinary retention.
- e. Endocrine system - insulin production decreases possibly causing excess sugar in blood. Adrenal secretions decrease reducing ability to handle stress. Thyroid secretions decrease slowing metabolism.
- f. Reproductive system – hormone production decreases. Decreased estrogen in females causes menopause. Decreased testosterone in males slows sexual response. Prostate gland may become enlarged causing difficulty when urinating.
- g. Integumentary system - loss of fat and water in skin causes increased sensitivity to cold, dehydration, wrinkling and sagging. Decrease in oil production causes dry skin and hair. Decrease in sweat gland function causes loss of ability to regulate body temperature. Changes in pigmentation causes gray hair and liver spots. Loss of capillary function causes yellowing of skin, thickening of nails, and thinning hair.
- h. Musculoskeletal system – bones become more brittle and porous and may fracture more easily. Loss of muscle strength and tone causes weakness and feeling tired. Less flexible joints make moving more difficult. Changes in spine and feet result in height loss, postural changes and difficulty walking.

- i. Nervous system - decreased blood flow to certain areas of brain causes decreased short-term memory. Nerve cells die causing decreased perception of sensory stimuli and less awareness of pain and injury.

3. Sensory changes affect how the older person perceives the environment. All information about the environment is sent to the brain through the senses:

- a. Sight – changes in the eye affect visual perception. The lens becomes flattened and rigid and the small muscles lose elasticity, decreasing the ability to focus on things that are close (presbyopia). The lens becomes more yellow, therefore, greens and blues are difficult to see. Reds and oranges are easier to see. Pupil size becomes smaller, less light reaches the inner eye making it more difficult to see in low light.
- b. Hearing - structures within the ear become stiff causing the loss of hearing of high frequency sounds (presbycusis). Soft wax production decreases and hard, dry wax builds up causing hearing loss.
- c. Smell – ability to smell decreases causing decreased appetite. Identifying smells becomes more difficult, (i.e. body odors, smoke, chemicals).
- d. Taste – taste buds are less perceptive, especially salty and sweet. More seasoning may be needed on food.
- e. Touch - decreased sensitivity in the skin results in less information from touch. Hot items are difficult to detect causing burns. Injuries from bumping are not readily felt and treated. Person may drop things more often.

4. Psychosocial changes that occur with aging affect how people perceive themselves as individuals and as a part of society:

- a. Social changes - loss of friends and relatives, loss of ability to participate in social functions.
- b. Status changes - changes in the individual's role within a group (family, community, or workplace) may result in feelings of being less productive and less respected.
- c. Economic changes – changes in income and ownership. The person may have given up their home, car, or possessions.
- d. Positive self-esteem - becomes difficult to maintain.

5. LNA's role:

- a. **Help each resident be as independent as possible.** Avoid taking over tasks that resident's can accomplish for themselves.
- b. Be patient. Be a good listener.
- c. Be very aware of resident safety and potential hazards.
- d. Allow the resident as much freedom as possible.
- e. Help resident feel comfortable in his surroundings.
- f. Have empathy for the resident, his family and visitors.
- g. Touch can be an important means of reducing loneliness but understand and respect that some residents do not like to be touched.
- h. Help to create, but do not force, new relationships for the resident.
- i. Encourage a resident to set new goals as their needs change.
- j. Do not pass judgment on resident's preferences.
- k. Treat each resident as an adult. Address residents by the name and title they prefer.

ADDITIONAL DEFINITIONS:

Lung Capacity – amount of air the lungs can take in **Rigid** – stiff, hard, unable to bend **Constipation** – hard, dry stool usually occurring infrequently **Pigmentation** – coloration in skin or eye

Porous – full of holes **Flexible** – capable of being bent **Sensory Stimuli** – information received through sight, hearing, taste, touch and smell