



RAMA
UNIVERSITY

www.ramauniversity.ac.in

FACULTY OF NURSING



CARE OF ELDERLY

FROM: Mr ANWAR SHAHJAD
MSN LECTURER

INTRODUCTION



- A man's life is normally divided into five main stages namely infancy, childhood, adolescence, adulthood and old age. In each of these stages an individual has to find himself in different situations and face different problems. The old age is not without problems. In old age physical strength deteriorates, mental stability diminishes; money power becomes bleak coupled with negligence from the younger generation.

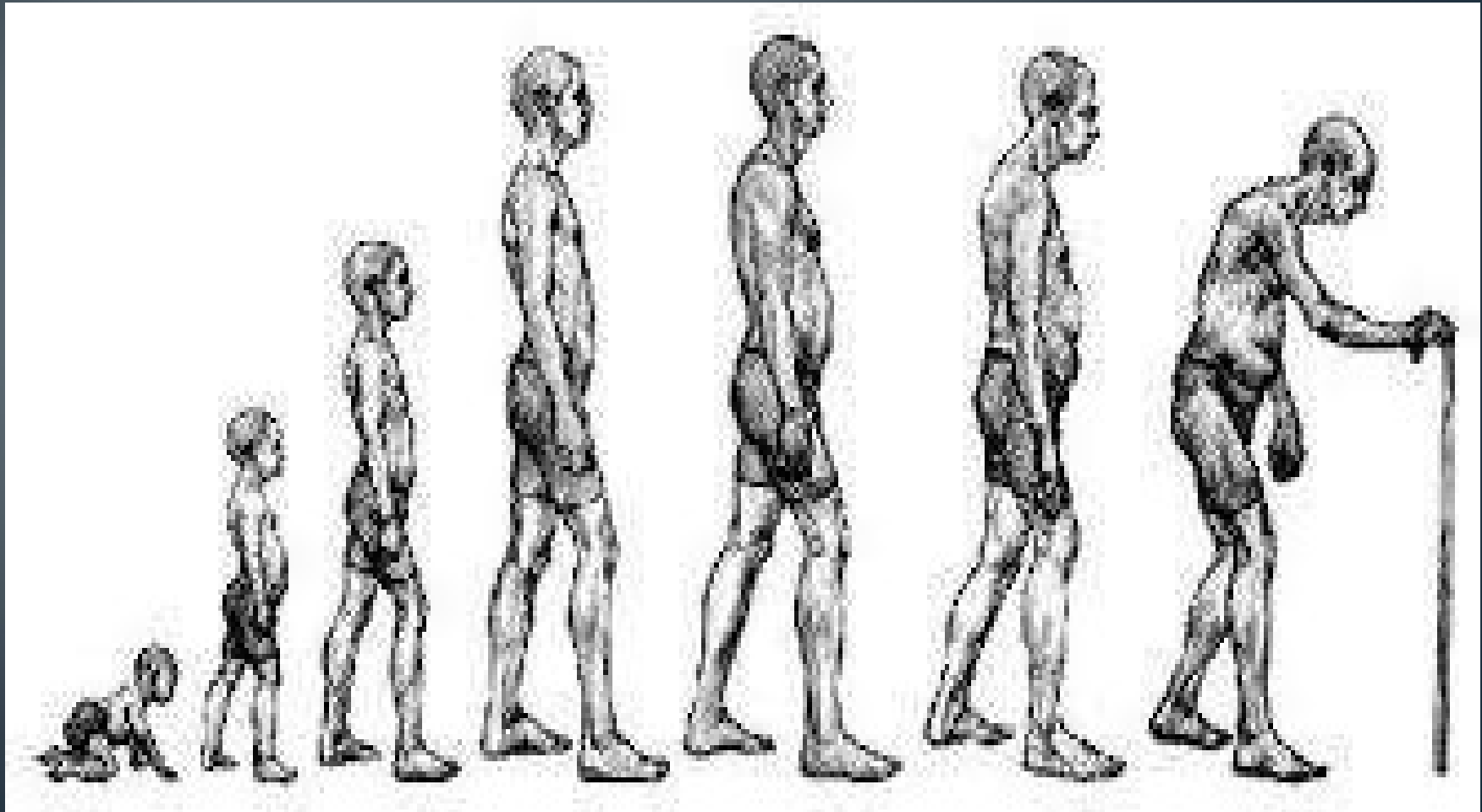
DEFINITION

- Elderly is an individual over 65 years old who have a functional impairments

Elderly care, or simply eldercare, is the fulfillment of the special needs and requirements that are unique to senior citizens. This broad term encompasses such services as assisted living, adult day care, long term care, nursing homes (often referred to as residential care), hospice care, and home care



THE NORMAL AGING PROCESS



INTRODUCTION

- Aging is not merely the passage of time. It is the manifestation of biological events that occur over a span of time.
- It is important to recognize that people age differently. The aging body does change. Some systems slow down, while others lose their "fine tuning."
- As a general rule, slight, gradual changes are common, and most of these are not problems to the person who experiences them. Sudden and dramatic changes might indicate serious health problems.

Normal aging has four aspects:

- **BIOLOGICAL ASPECT OF AGING**
- **PSYCHOLOGICAL ASPECTS OF AGING**
- **SOCIOCULTURAL ASPECTS OF AGING**
- **SEXUAL ASPECTS OF AGEING**

BIOLOGICAL ASPECT OF AGING

- Individuals are unique in their psychological and physical aging process. As the individual ages, there is a quantitative loss of cells and changes in many of enzymatic activities within cells . Age related a change occurs at different rate in different people.



NERVOUS SYSTEM

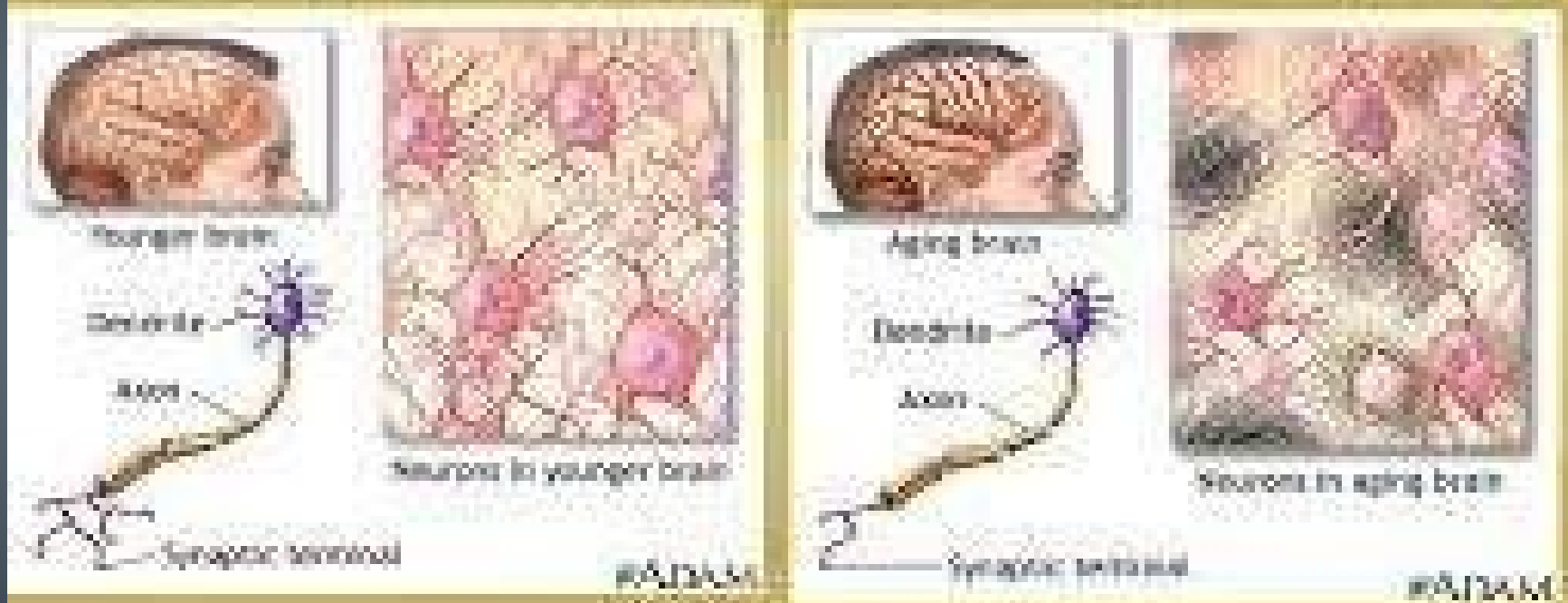
- Decreased speed of neural conduction
- Decreased number of brain cells
- Decrease in cell of the nerve fibers
- Decreased neurotransmitters
- Decline in memory for recent events
- Decreased rapid eye movement sleep
- Decreased cerebral circulation

Healthy, Human
Brain



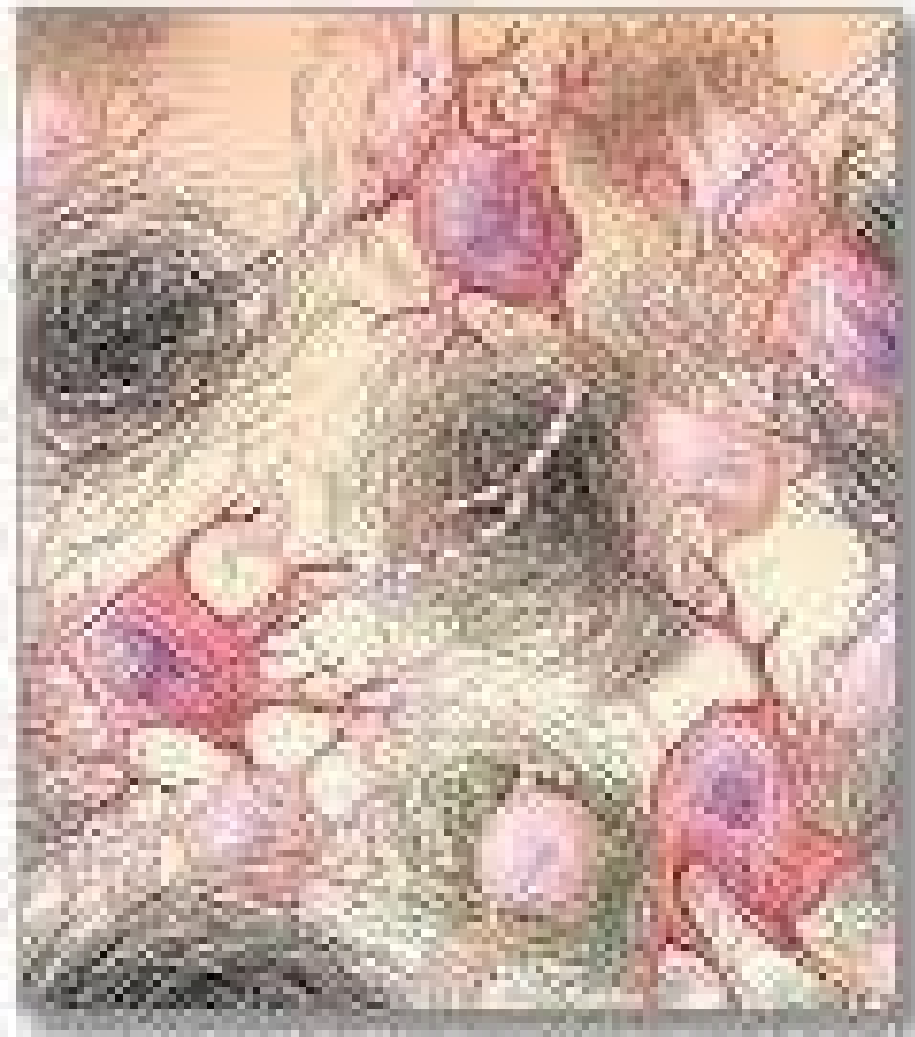
Aged, Human
Brain

Nervous System: Changes

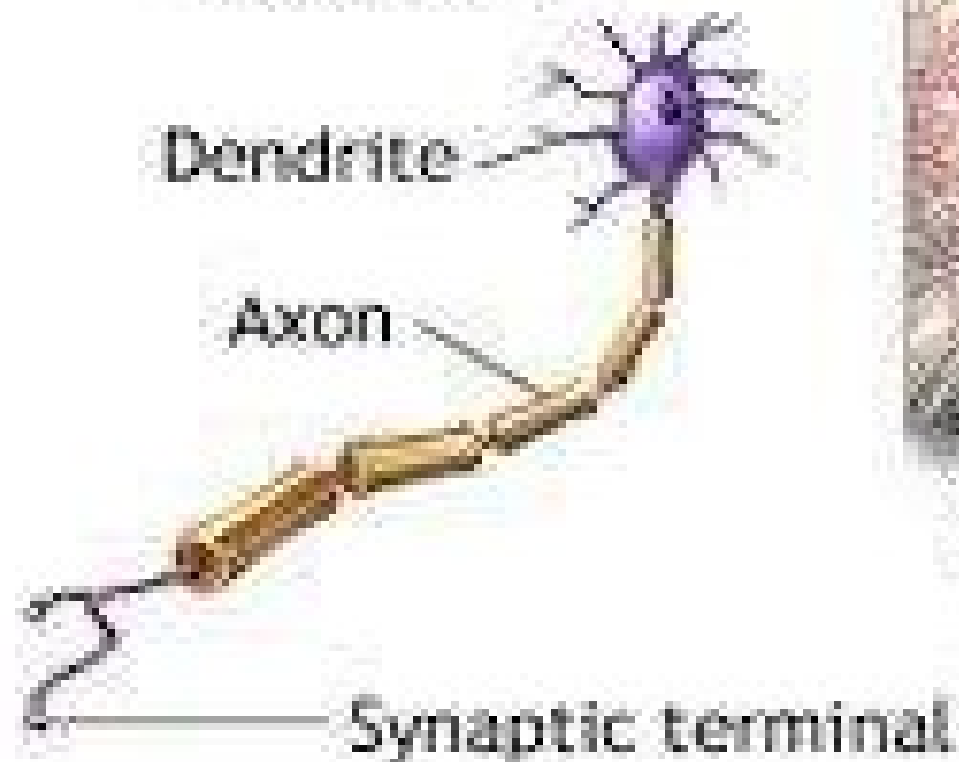




Aging brain



Neurons in aging brain



- **SENSORY CHANGES**

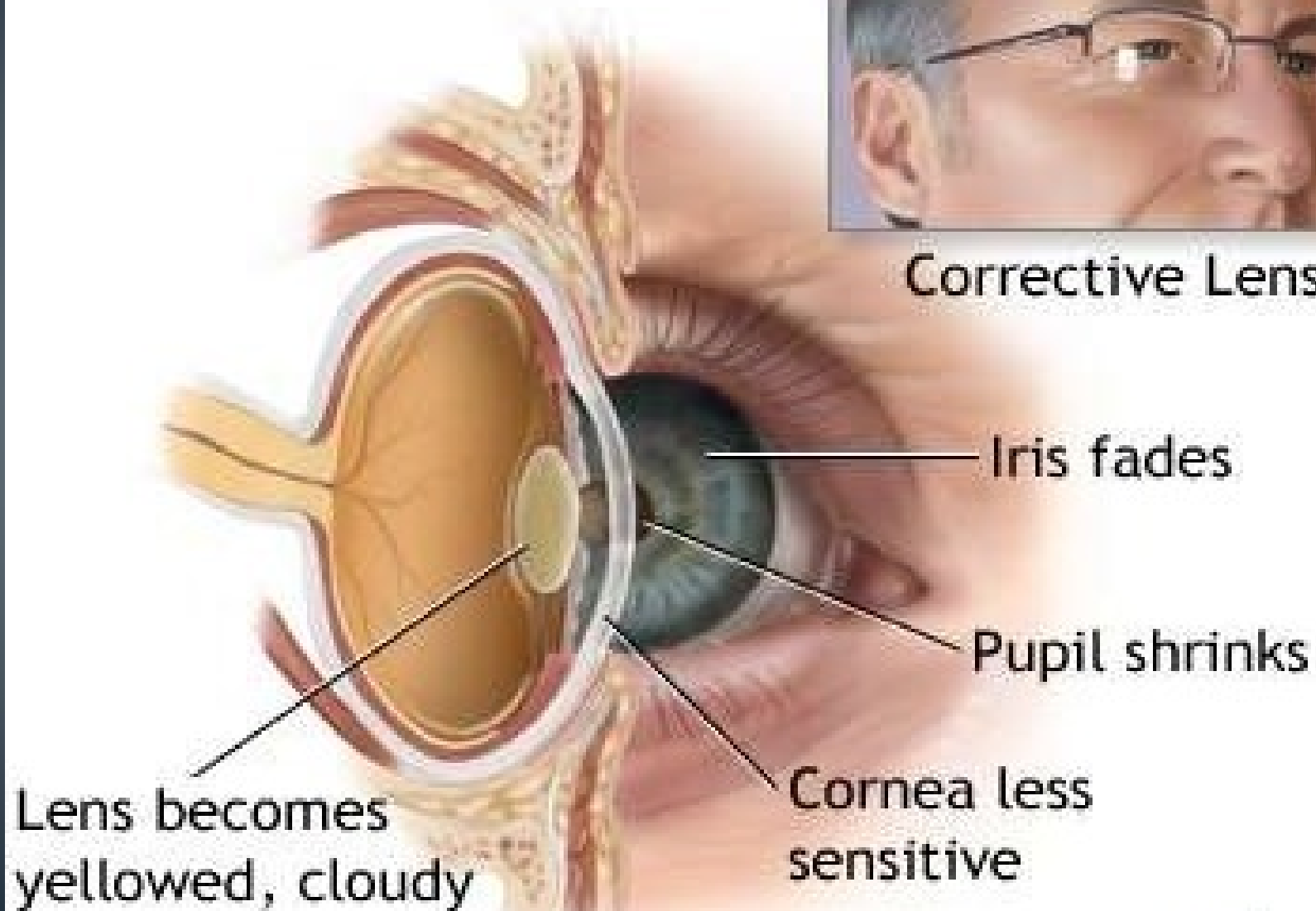
- **Eye :**

- Diminished ability to focus on close objects
- Decreased visual acuity
- The eye's external changes give evidence of advancing age. These changes result from loss of orbital fat, loss of elastic tissue and decreased muscle tone.
- The cornea flattens which reduces the refractory power
- The retina of older individual becomes thinner because of fewer neural cells and receives only 1/3rd of the amount of light that of a younger person. Due to this problem in reading, not able to see in dim light and also have difficulty in colour perception.
- The lens of the eye loses its elasticity and increases in density

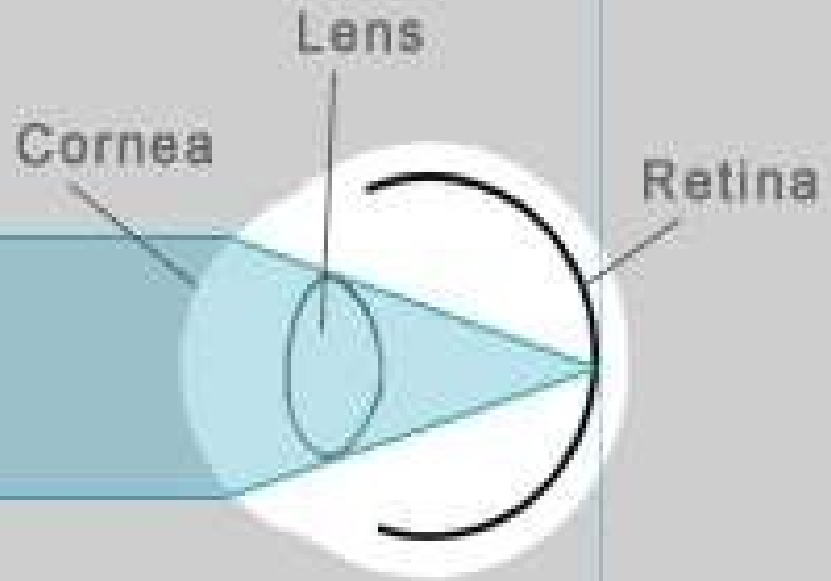
Older Eye



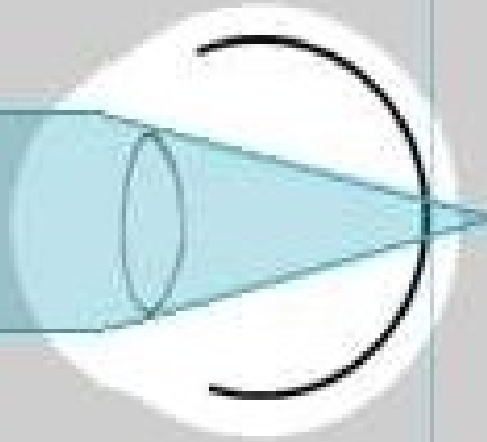
Corrective Lenses



Normal eye



Ageing eye

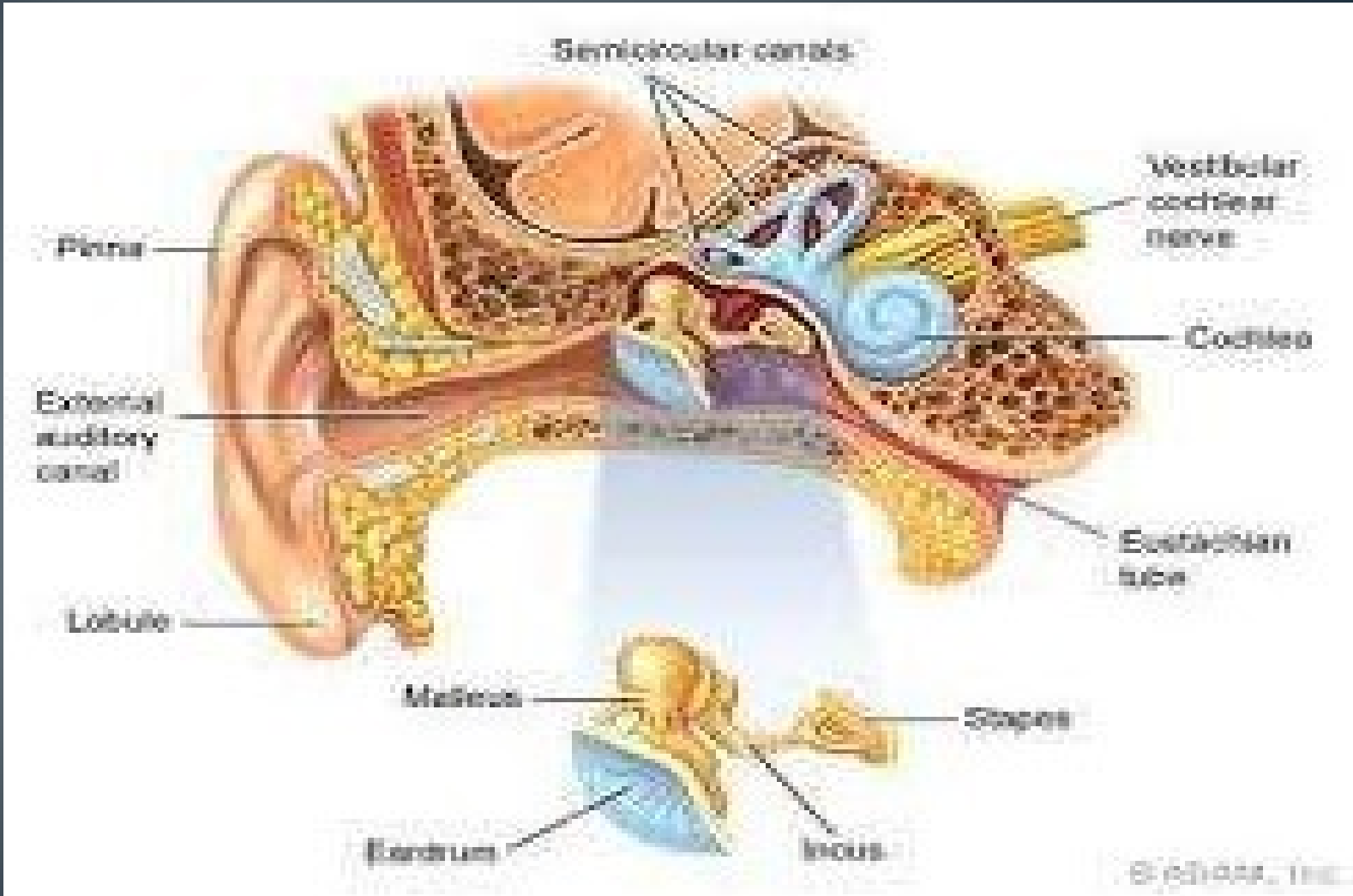


Ear:

- Hearing problem
- Cerumen gland are reduced in number dry and hard ear wax, along with itching.
- Degenerative changes occur in ossicles contributing to hearing loss
- Presbycusis is the term used to describe hearing loss associated with normal aging.

Taste and smell:

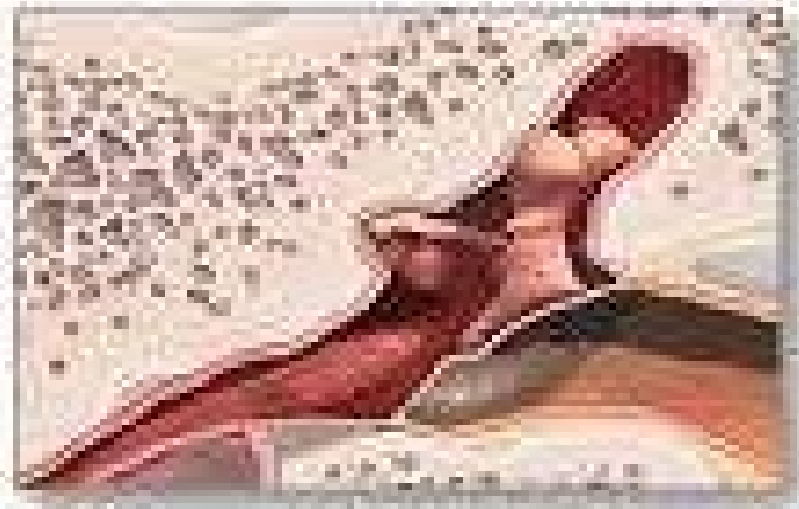
- Decreased ability to taste and smell
- Very rarely the capacity to smell diminishes;
- Taste perception and taste discrimination decreases as the age advances





Outer ear

Young



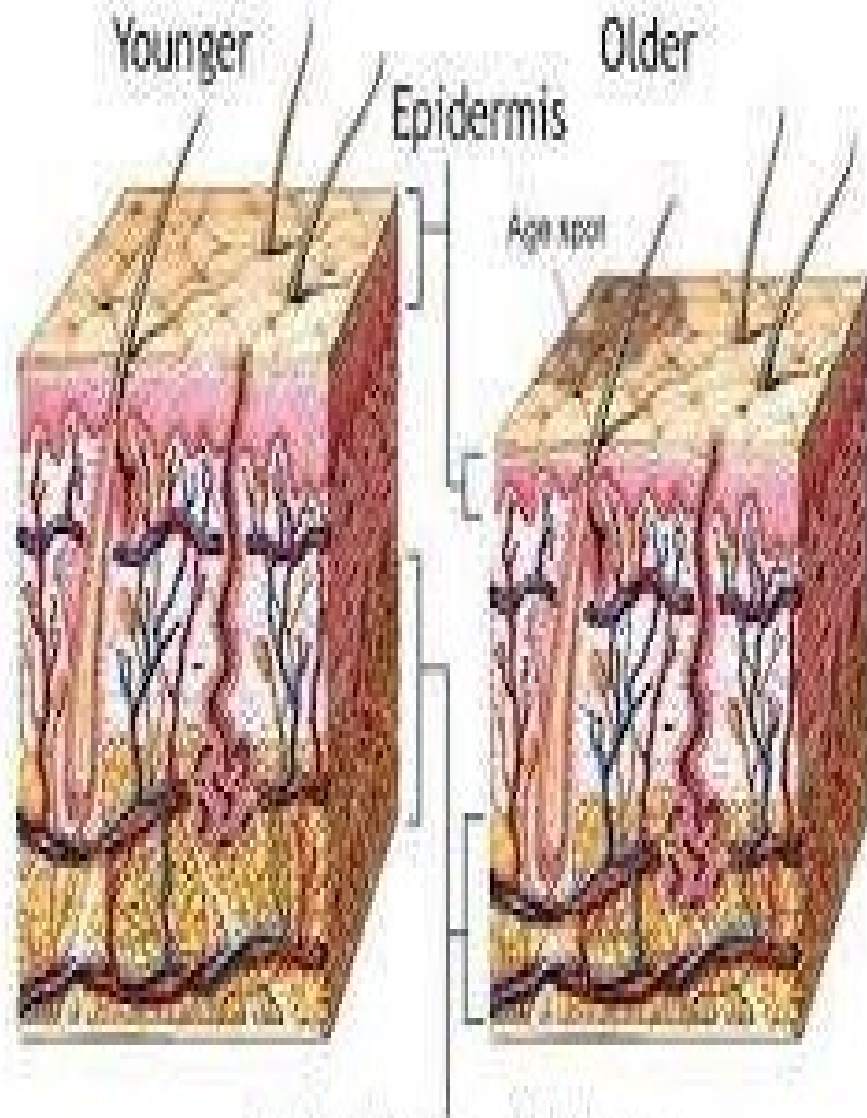
Thickened eardrum

Old



INTEGUMENTARY SYSTEM

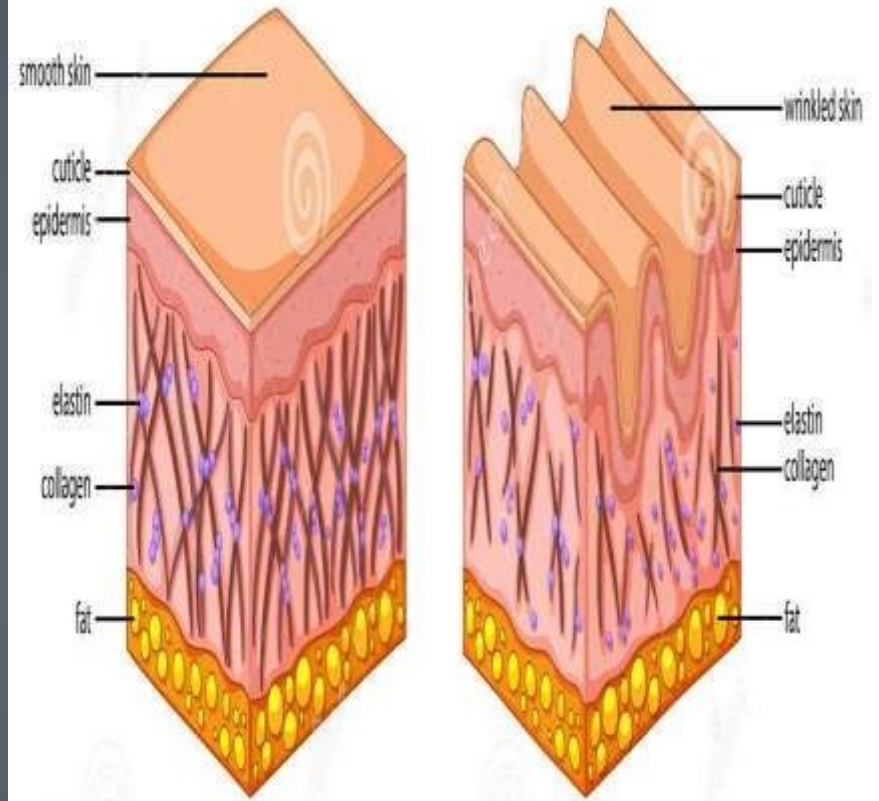
- Decreased elasticity
- Decreased secretion of natural oil and perspiration
- Thinning of skin
- Decreased heat regulation
- Decreased protection against trauma and solar exposure
- The number of pressure and light touch sensors decreases with age
- Immune, vascular and thermoregulatory responses of the skin decrease with age.
- Loss of hair colour and thinning of pubic, axillary and scalp hair.



Subcutaneous fat layer

Young Skin Section

Aged Skin Section



CARDIOVASCULAR SYSTEM

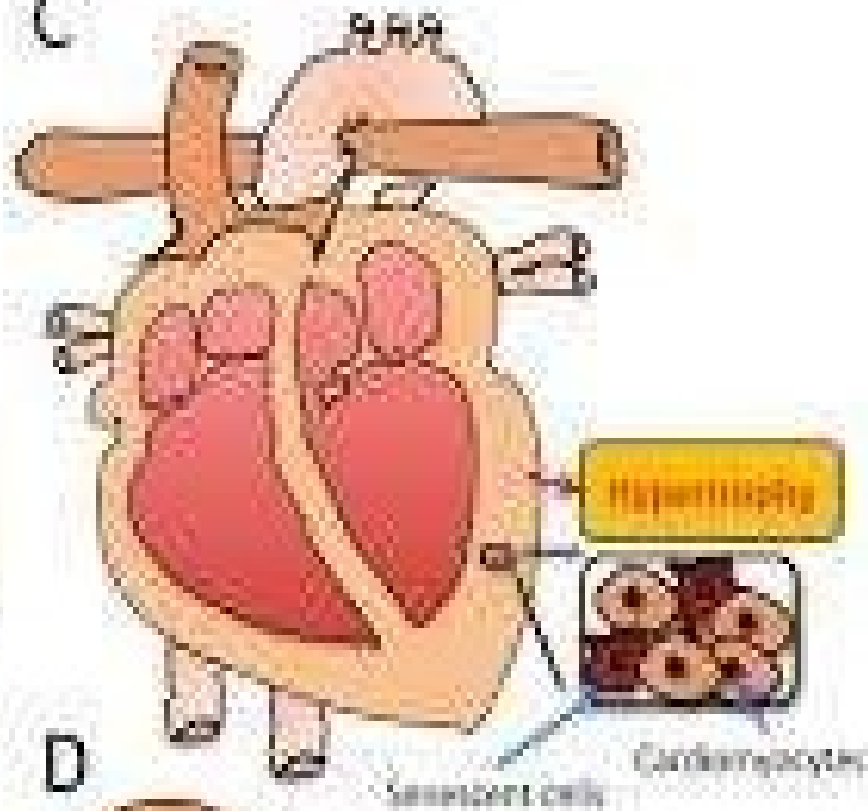
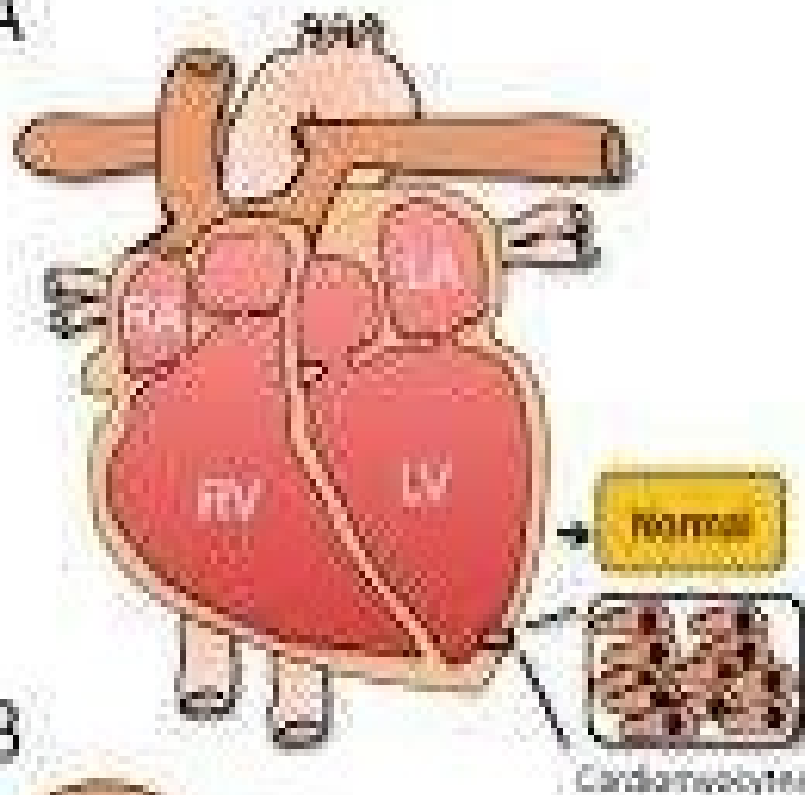
- Decreased physical demands and activity of heart.
- Slower heart rate and reduce cardiac output
- Decreased contractility
- Impaired coronary artery blood flow
- Less oxygen and blood supply to organ, so that it affects the function of organ
- Decreased altered preload and after load
- Increased atherosclerotic plaques and blood pressure
- Diminished ability to respond to stress.

YOUNG

AGED

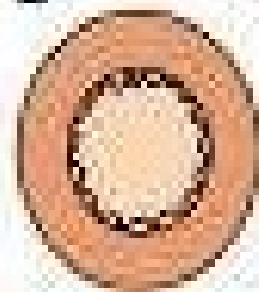
A

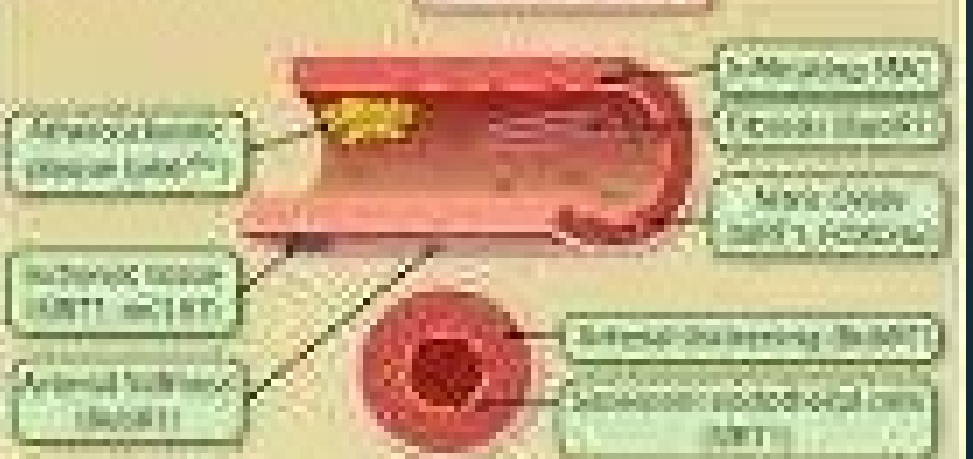
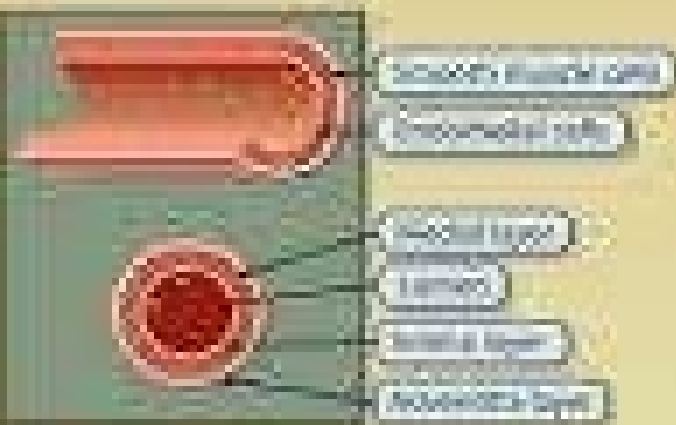
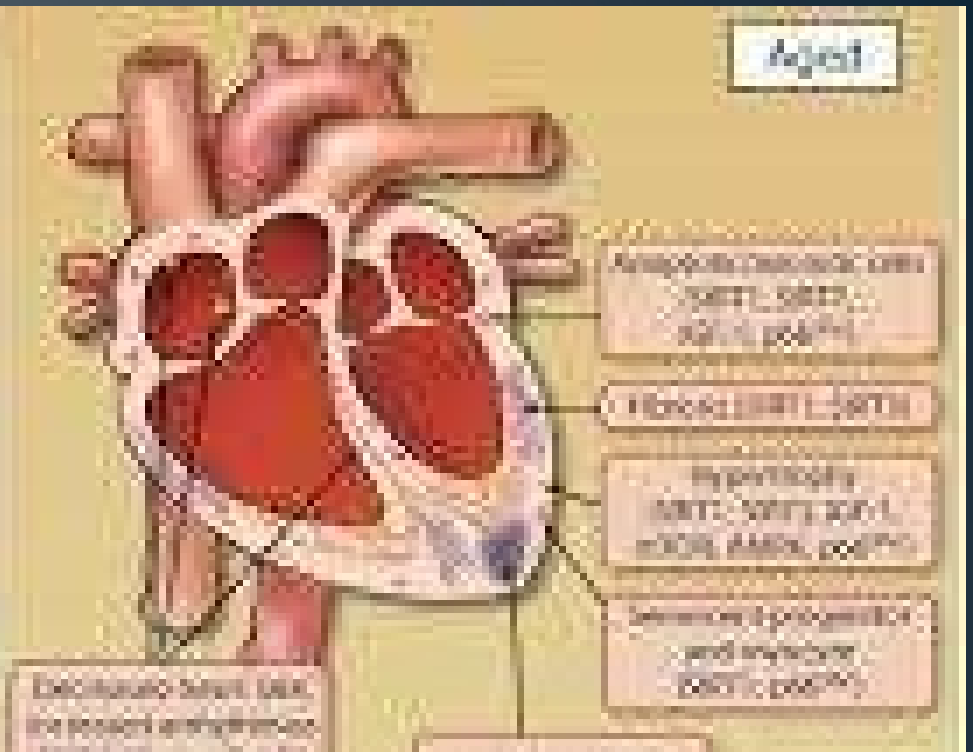
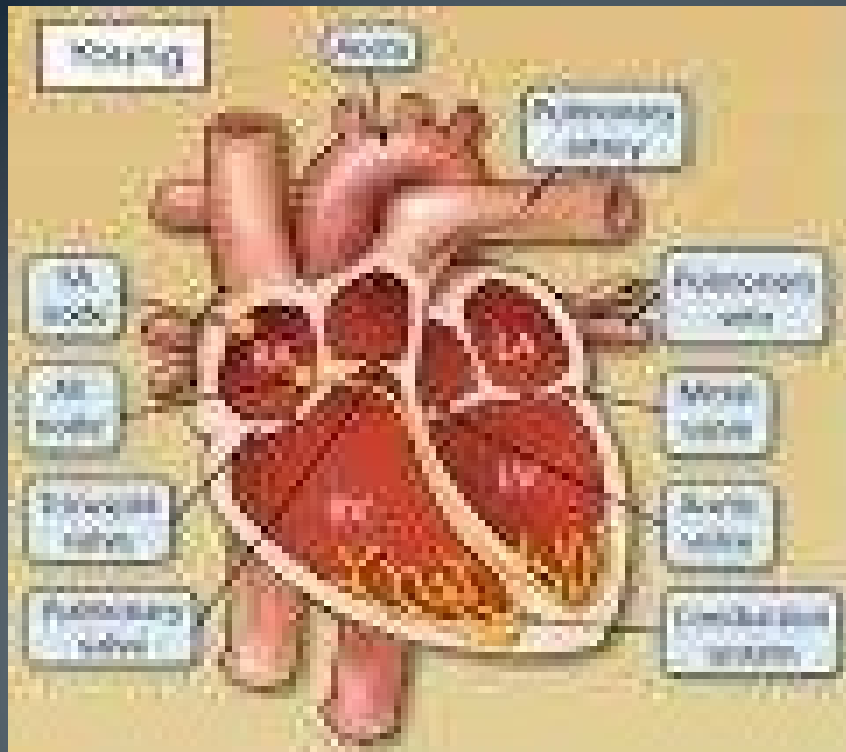
C



B

D

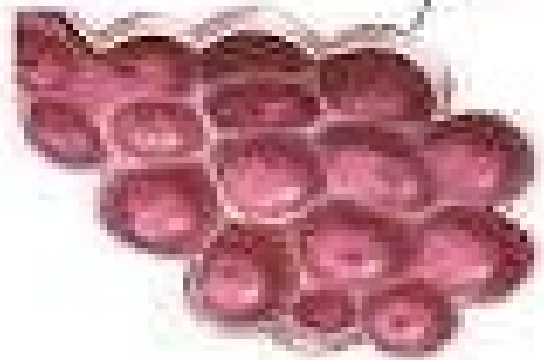
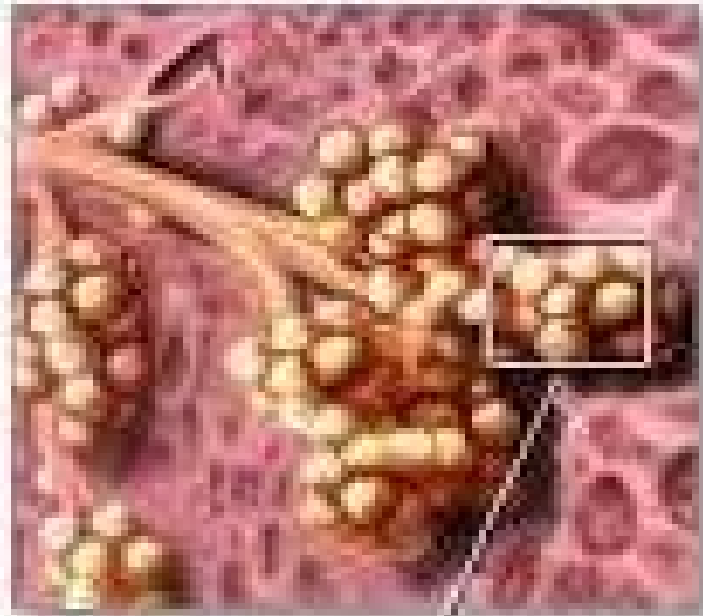




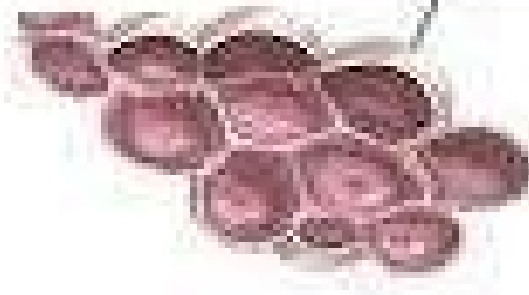
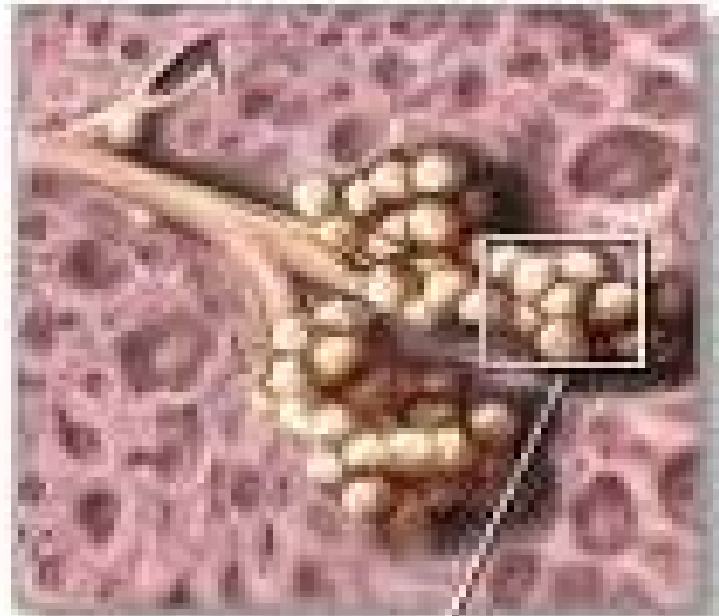
RESPIRATORY SYSTEM

- Respiratory muscles are atrophy and weaken so reduced the ability of chest enlarge
- Short of breath
- Increased rigidity of thoracic cage, residual lung volume
- Decreased gas exchange and diffusing capacity
- Decreased elasticity and vital capacity
- Decreased cough efficiency.

Younger

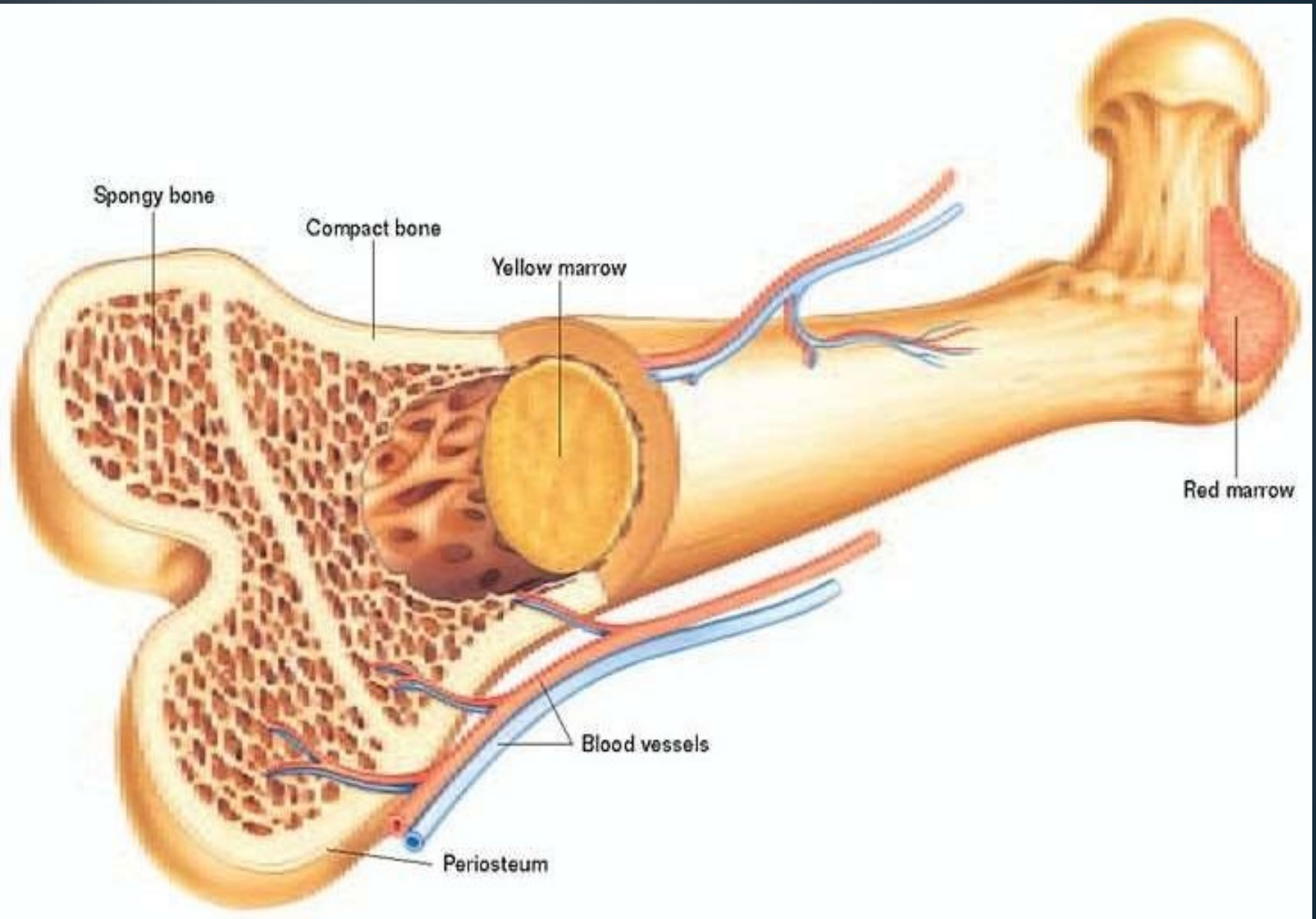


Older

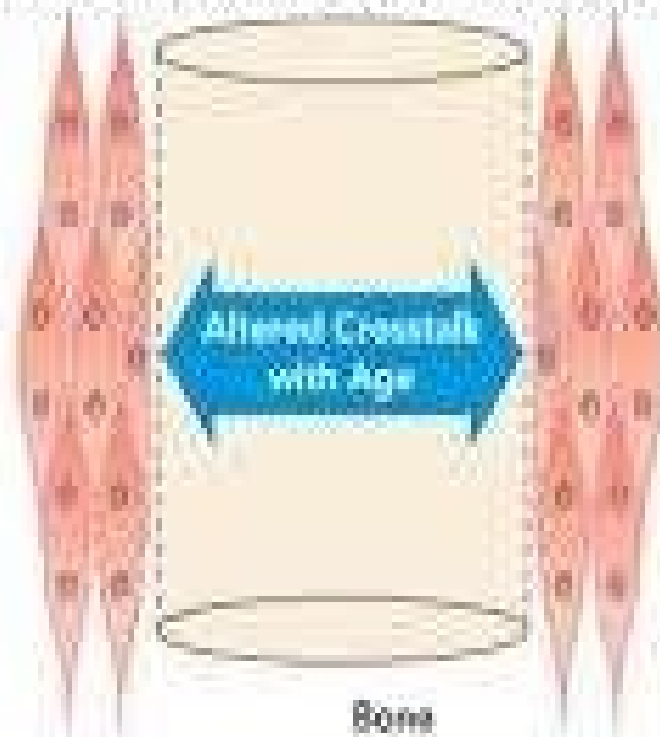
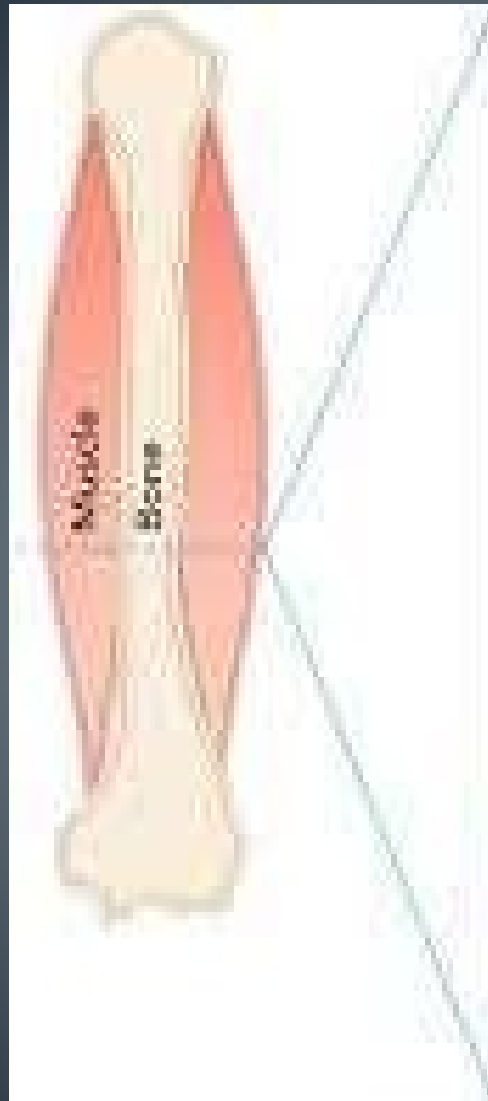


MUSCULOSKELETAL SYSTEM

- Decreased bone density
- Decreased muscle size and strength
- Decreased joint cartilage
- In aging, the increased parathyroid hormone, decreased vitamin D and calcitonin also play role in calcium loss in older people.
- In women, estrogen deficiency, calcium malabsorption, lifestyle factors (calcium intake and exercise) can result in bone loss.
- Aging brings decline in numbers of muscles resulting in reduced muscle mass.
- The muscle strength also reduces especially due to lack of exercise.



Age-Associated Changes in Muscle and Bone



Muscle

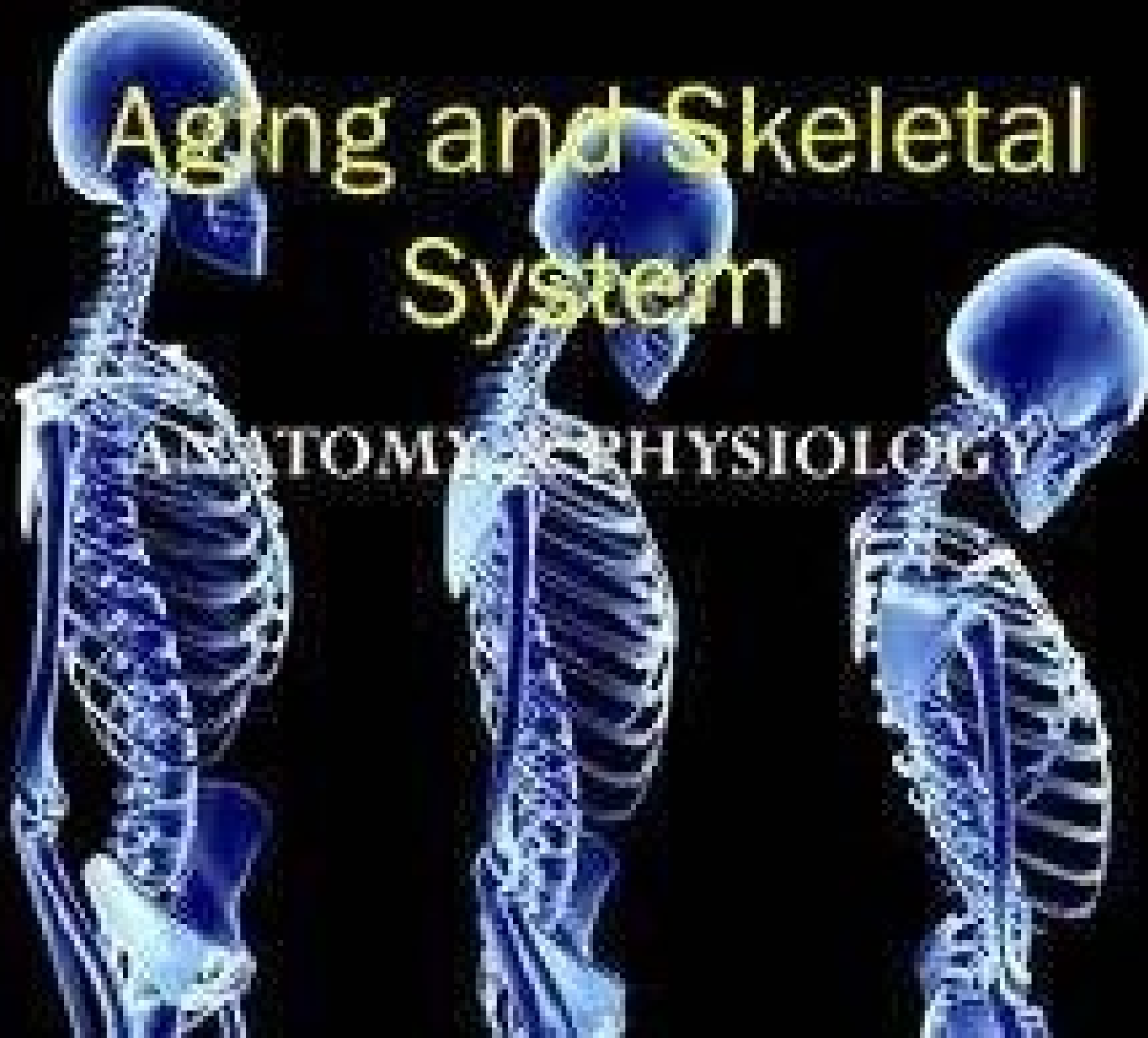
- Decreased fiber size
- Atrophy of fast twitch fibers
- Fatty infiltration-myosteatosis
- Loss of motor neurons
- Degradation of NMJ

Bone

- Decreased cellularity of periosteum
- More empty osteocyte lacunae
- Fatty infiltration of bone marrow
- Attenuated periosteal response to growth factors and to PTH

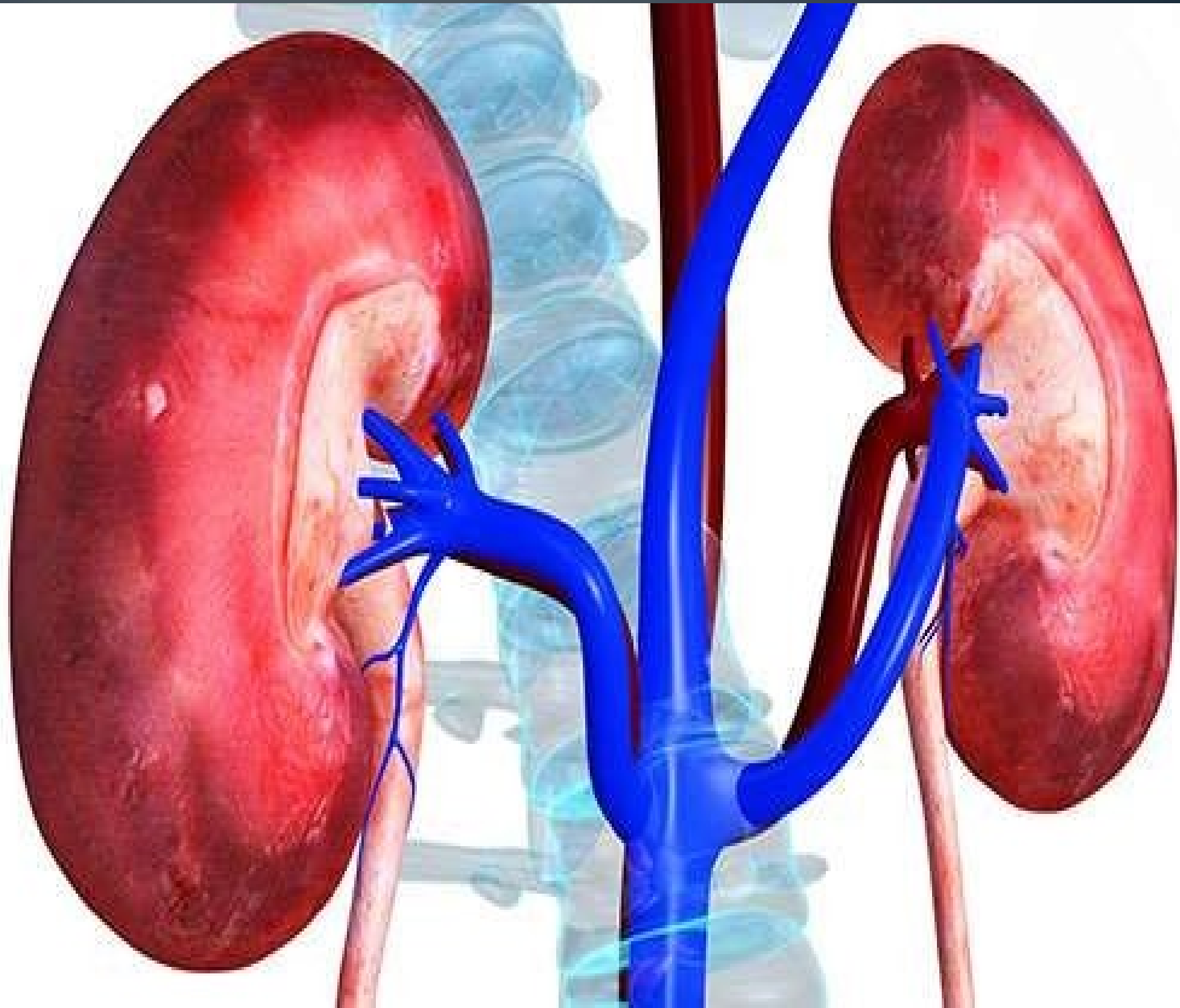
Aging and Skeletal System

ANATOMY & PHYSIOLOGY

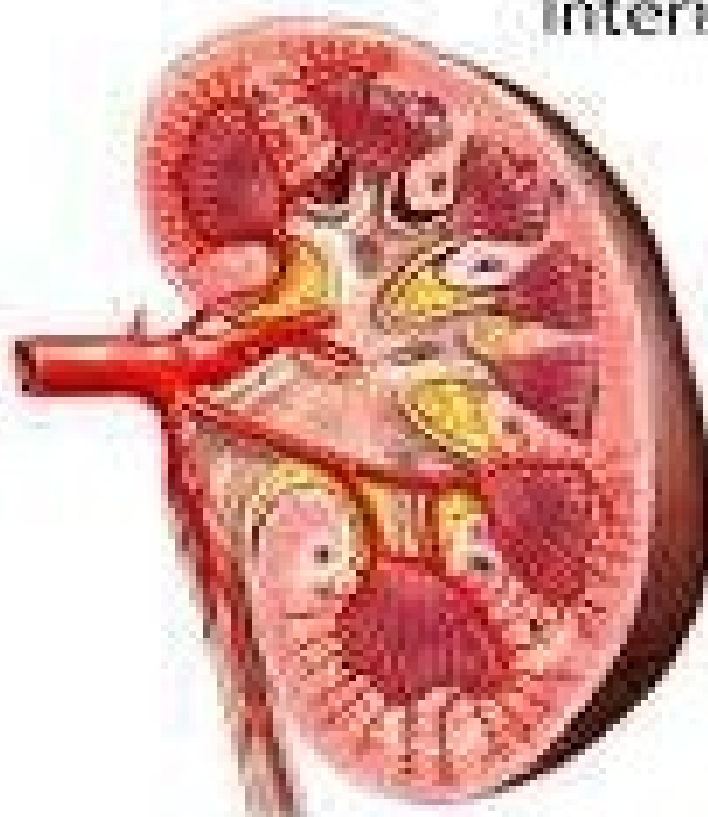


URINARY SYSTEM

- Decreased blood supply and loss of nephrons
- Less blood can filtered by the kidney
- Decreased bladder capacity, and concentrating
- Decreased diluting ability
- Increased prostate size
- Delayed sensation to void
- In female relaxed perineal muscles
- In men, BPH is associated with aging leads to urinary incontinence (dribbling).
- Increasing age is also associated with an increase in involuntary bladder contractions, a reduction in bladder capacity and an increase in residual volume. These contribute to development of incontinence in older adults.
- Weak pelvic muscles causes stress incontinence.



Interior of kidney



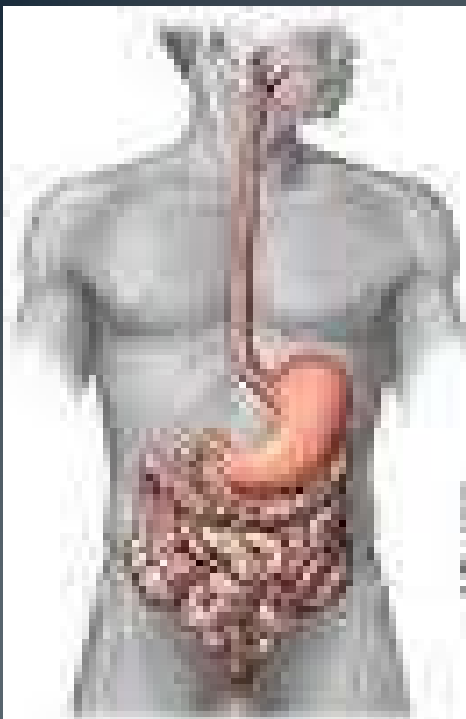
Younger



Older

GASTROINTESTINAL SYSTEM

- Decreased salivary secretions, loss of teeth
- Lose of sense of smell and taste so decrease the appetite and desire food
- Slowing of peristaltic action
- Altered nutrition, digestion and bowel function
- Weakening of lower esophageal sphincter
- Difficult to chew food because of loose teeth.
- Liver weight and size decreases with age
- There is decrease in number of hepatic cells and as a result, a diminished capacity for metabolism of drugs and hormones.

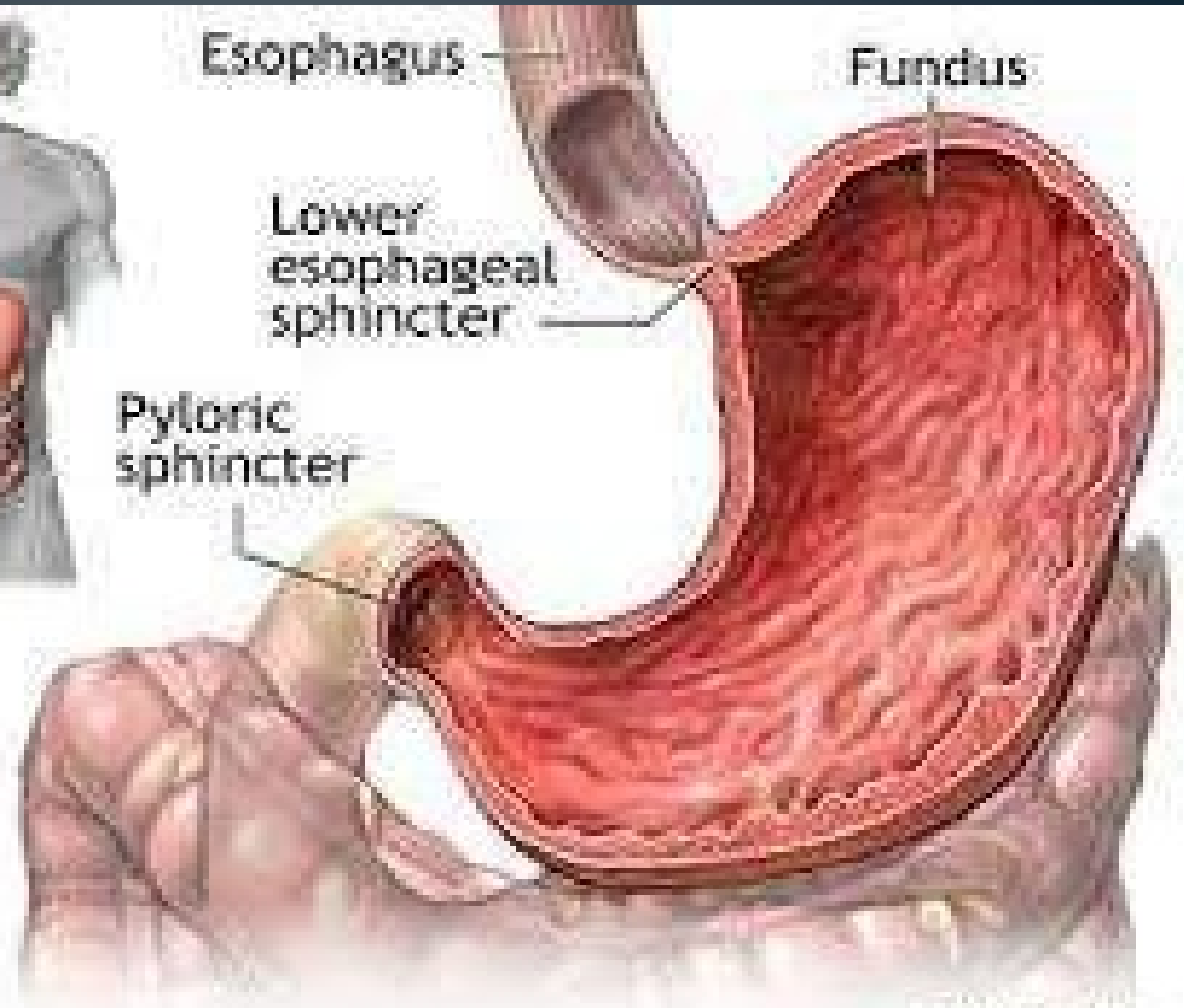


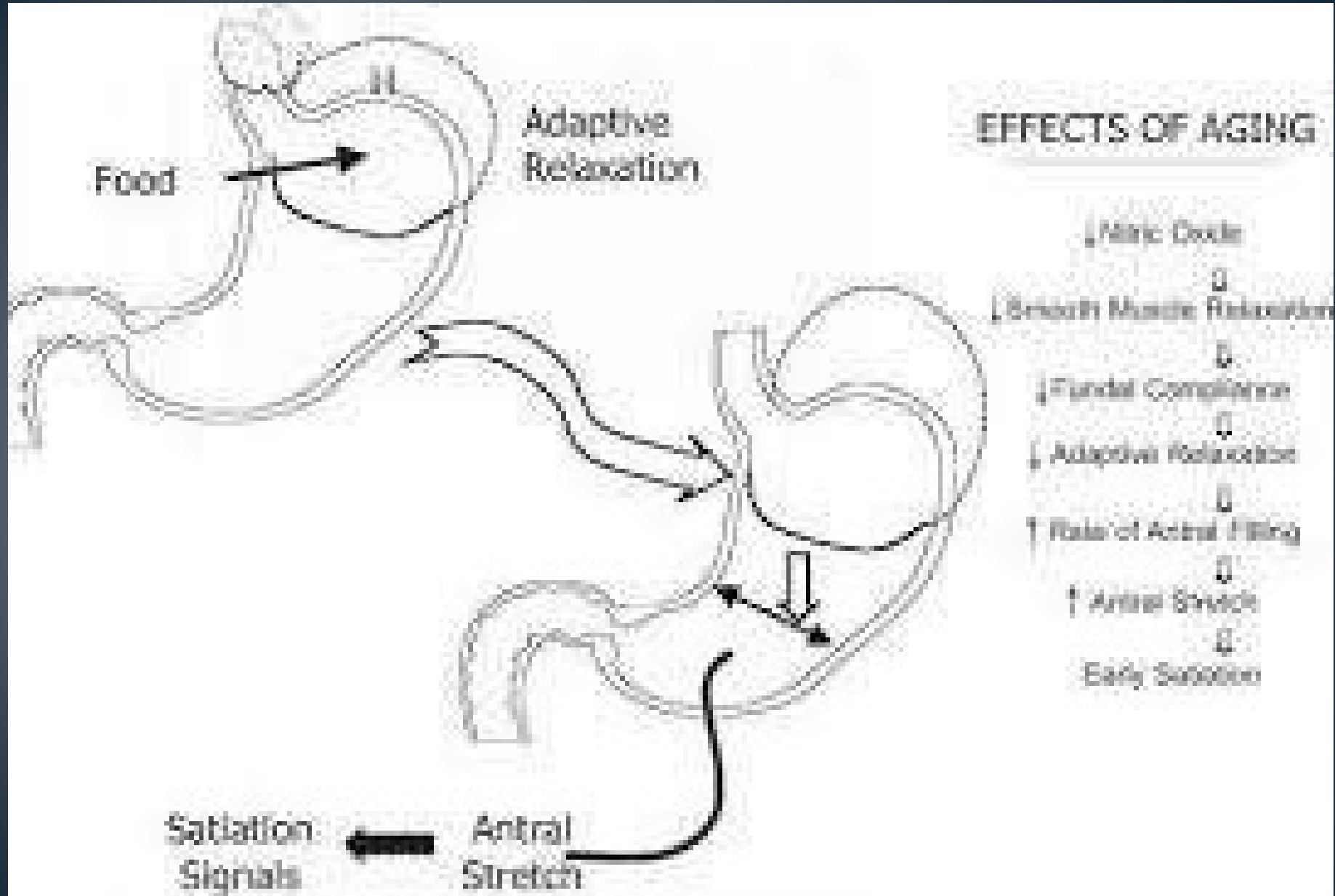
Esophagus

Fundus

Lower esophageal sphincter

Pyloric sphincter

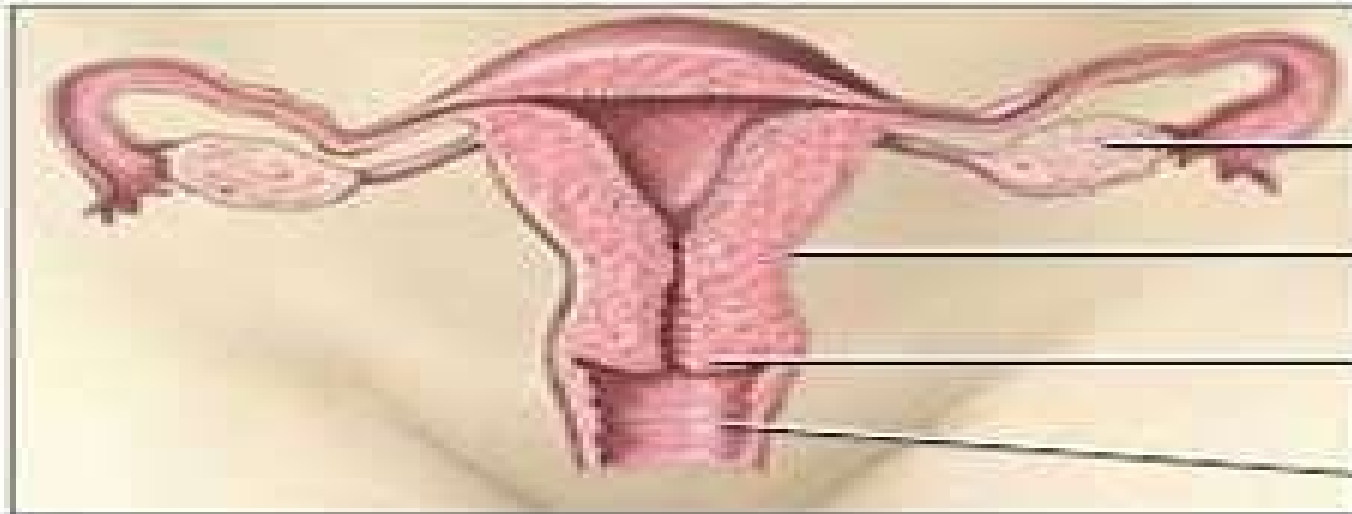




REPRODUCTIVE SYSTEM

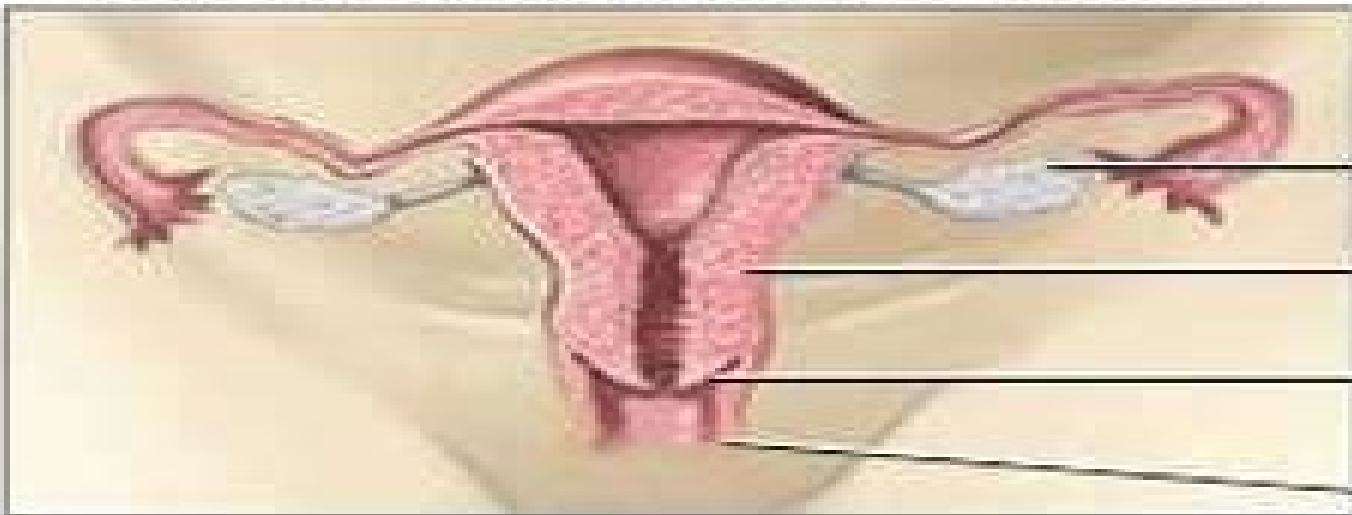
- **Changes in women**
- Decreased breast tissue
- Sexual dysfunction
- Decreased sexual desire
- Vaginal narrowing and decreased elasticity
- Decreased vaginal secretions

Younger reproductive system



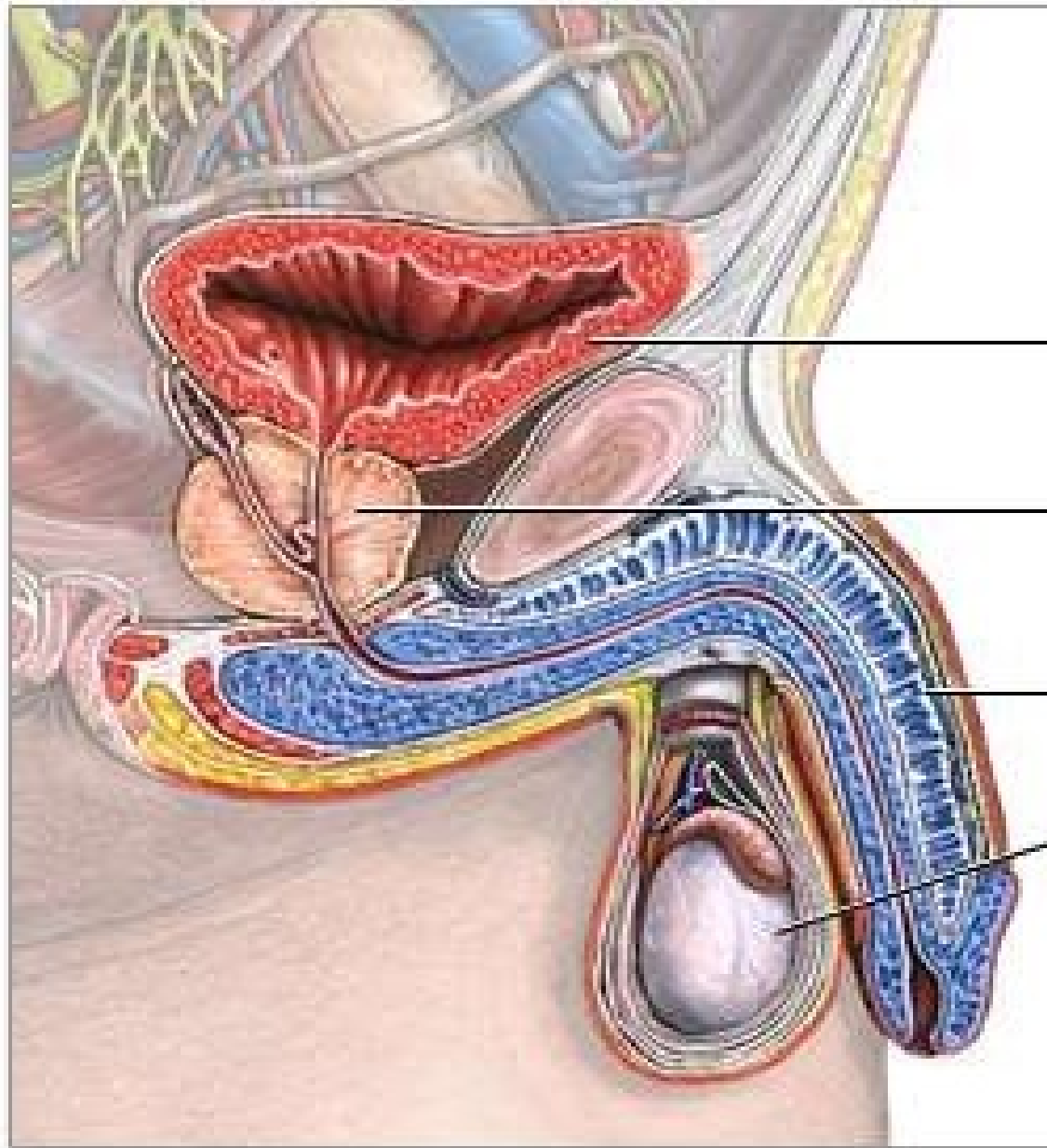
Ovary
Uterus
Cervix
Vagina

Older reproductive system



Ovary
Uterus
Cervix
Vagina

- **Changes in men**
- In male decreased size of penis and testes
- Erectile ability undergoes changes. Takes longer time for erection, amount of semen is reduced and the intensity of ejaculation is lessened.
- It is not clear that whether the increase in impotence is age related



Older male reproductive system

Bladder

Prostate
enlarged

Penis

Testicular
tissue mass
decreased

PSYCHOLOGICAL ASPECTS OF AGING



Memory functioning

- Short term memory deteriorate with age, long term memory does not show similar changes.
- A well educated and mentally active person does not exhibit such changes in faster rate.
- The time required for memory scanning is longer for both recent and remote recall among older people.
- This can be attributed to social or health factors (stress, fatigue, illness), but it can also occur with certain physiological changes due to aging. (decreased blood flow to the brain)



Intellectual functioning

- Fluid abilities or abilities involved in solving novel problems, tend to decline from adult period to old age.
- High degree of regularity in intellectual function present on most of the old age people
- Intellectual abilities of older people do not decline, but do become obsolete.
- Their formal educational experience is reflected in their intelligence performance



Learning ability

- The ability to learn is not decline by age.
- The slowing of reaction time with age and over arousal of central nervous system are noted in old age. It may lead to lower level of performance in tasks which requires high efficiency.
- Ability to learn continue throughout the life, although strongly influenced by personal interests and preferences.
- Accuracy of performances diminishes.



Loss and grief

- By the time individuals reach 60-70 yrs of age , they have experienced numerous losses, and mourning has become a life long process.
- It is impossible for some of the older age people to complete the grief process in response to one loss before the other loss occurs.
- Because the Grief is cumulative, this can result in bereavement over load.
- This can further predispose to depression.

Attachment to others

- The need for attachment is consistent through out the life span
- Well being of senior citizens can be contributed through socialization and companionship.

Dealing with death

- Death anxiety among the elderly is more of a myth than reality
- The feeling of abandonment, pain and loss may leads to fear or anxiety in elderly

Psychiatric disorders

- The later life constitute a time of especially high risk for emotional distress
- Dementia, depressive disorders, delirium, sleep disorders etc are the most common psychiatric illness seen among elderly.

SOCIOCULTURAL ASPECTS OF AGING

- Old age brings many important socially induced changes, some of those changes have the
- potential for negative effect on both the physical and mental well being of older persons
- They want protection from hazards and weariness of every day tasks
- They want to be treated with respect and dignity and also want to die with respect and dignity
- In developing countries and Asian countries the aged are awarded a position of honor, that place emphasize on family cohesiveness.

- In industrialized countries many negative stereotyped perspectives on aging still persisting, aged are always tires or sick, slow and forgetful, isolated and lonely, unproductive etc
- Emplacement is one of the area where the aged faces discrimination. Although compulsory retirements has been eliminated, discrimination still persist in hiring and promoting the aged employees.
- The status of elderly may improve with time as the number of elder person increases world wide

SEXUAL ASPECTS OF AGEING

Changes in female

- Menopause may begin anytime during the 40s or early 50s
- Gradual decline in the functioning of the ovaries and subsequent reduction in the production of estrogen.
- The walls of the vagina become thin and inelastic and vaginal lubrication decreases.
- Orgasmic uterine contractions become spastic.
- All these changes result in vaginal burning, pelvic aching, irritability etc
- In some women these changes result in avoidance of sexual intercourse
- These symptoms are more likely to occur with infrequent intercourse of only one time a month or less
- Regular and more frequent sexual activity result in a greater capacity for sexual performance

Changes in male

- Testosterone production decline gradually as the age increases
- As a result of these hormonal changes the erection takes place slowly and requires more genital stimulation to achieve.
- The volume of ejaculate decreases and the force of ejaculation lessens
- The testis become smaller, but most men continue to produce viable sperm well in to old age.

FACTOR AFFECTING AGING:

Three types of factor that mainly affect aging



Genetic and
environmental
factor



Life style



Disease



Genetic and Environmental Factors

- The aging process depends on a combination of both genetic and environmental factors. Recognizing that every individual has his or her own unique genetic makeup and environment, which interact with each other, that is why the aging process can occur at such different rates in different people.
- **Environmental stress associated with exposure to excessive heat and light trigger the activity of aging genes.**

Life style:

- However, many environmental conditions, such as the quality of health care that you receive, have a substantial effect on aging. A healthy lifestyle is an especially important factor in healthy aging and longevity .
- Behaviors of a Healthy Lifestyle
 - Not smoking
 - Drinking alcohol in moderation
 - Exercising
 - Getting adequate rest
 - Eating a diet high in fruits and vegetables
 - Coping with stress
 - Having a positive outlook

- Aging process in men is mainly brought about by over consumption of alcohol and heavy smoking. Lack of exercise, inadequate rest or sleep, mental stress show symptoms of early aging.
- Other factors like regular consumption of excessive spicy food and caffeine renders an old look. Sloth and sluggish lifestyle *makes* one feel old.

Disease

- Aging and disease are related in subtle and complex ways. Several conditions that were once thought to be part of normal aging have now been shown to be due to disease processes that can be influenced by [lifestyle](#). For example, heart and blood vessel diseases are more common in people who eat a lot of meat and fat. Similarly, cataract formation in the eye largely depends on the amount of exposure to direct sunlight.

- Osteoporosis and arthritis are the main factors governing [aging process in women](#).
- The toxins produced in Parkinson's disease degenerate the neurons that hinders the memory of brain.
- In Alzheimer's disease, a substance known as amyloid is produced that destroys the brain cells. All these interferes with the normal aging process.

THEORIES OF AGING:-

- **Biological theories**
- **Non-biological theories**
 - **Disengagement Theory**
 - **Activity Theory**
 - **Selectivity Theory**
 - **Continuity Theory**

Biological theories:

- At present, the biological basis of ageing is unknown. Most scientists agree that substantial variability exists in the rates of ageing across different species, and that this to a large extent is genetically based. In model organisms and laboratory settings, researchers have been able to demonstrate that selected alterations in specific genes can extend lifespan (quite substantially in nematodes, less so in fruit flies, and less again in mice) Even in the relatively simple and short-lived organisms, the mechanism of ageing remain to be elucidated.

Non-biological theories

1. Disengagement Theory

- This is the idea that separation of older people from active roles in society is normal and appropriate, and benefits both society and older individuals.
- There are research data suggesting that the elderly who do become detached from society as those were initially reclusive individuals, and such disengagement is not purely a response to ageing.

2. Activity Theory

- In contrast to disengagement theory, this theory implies that the more active elderly people are, the more likely they are to be satisfied with life. The view that elderly adults should maintain well-being by keeping active has had a considerable history
- However, this theory may be just as inappropriate as disengagement for some people as the current paradigm on the psychology of ageing is that both disengagement theory and activity theory may be optimal for certain people in old age, depending on both circumstances and personality traits of the individual concerned

3. Selectivity Theory

- Mediates between Activity and Disengagement Theory, which suggests that it may benefit older people to become more active in some aspects of their lives, more disengaged in others.

4. Continuity Theory

- The view that in ageing people are inclined to maintain, as much as they can, the same habits, personalities, and styles of life that they have developed in earlier years. Continuity theory is Atchley's theory that individuals, in later life, make adaptations to enable them to gain a sense of continuity between the past and the present, and the theory implies that this sense of continuity helps to contribute to well-being in later life

HEALTH PROBLEMS IN OLD AGE/ COMMON HEALTH PROBLEMS IN ELDERLY

Mental health problems among older adults

- Multiple social, psychological, and biological factors determine the level of mental health of a person at any point of time. As well as the typical life stressors common to all people, many older adults lose their ability to live independently because of limited mobility, chronic pain, frailty or other mental or physical problems, and require some form of long-term care. In addition, older people are more likely to experience events such as bereavement, a drop in socioeconomic status with retirement, or a disability. All of these factors can result in isolation, loss of independence, loneliness and psychological distress in older people.

Dementia

- Dementia is a syndrome in which there is deterioration in memory, thinking, behaviour and the ability to perform everyday activities. It mainly affects older people, although it is not a normal part of ageing.
- It is estimated that 47.5 million people worldwide are living with dementia. The total number of people with dementia is projected to increase to 75.6 million in 2030 and 135.5 million in 2050, with majority of sufferers living in low- and middle-income countries.



LOST

CONFUSED

UNSURE

UNCLEAR

PERPLEXED

DISORIENTED

BEWILDERED



- **Depression**

- Depression can cause great suffering and leads to impaired functioning in daily life. Unipolar depression occurs in 7% of the general elderly population and it accounts for 5.7% of YLDs among over 60 year olds. Depression is both under diagnosed and undertreated in primary care settings. Symptoms of depression in older adults are often overlooked and untreated because they coincide with other problems encountered by older adults.

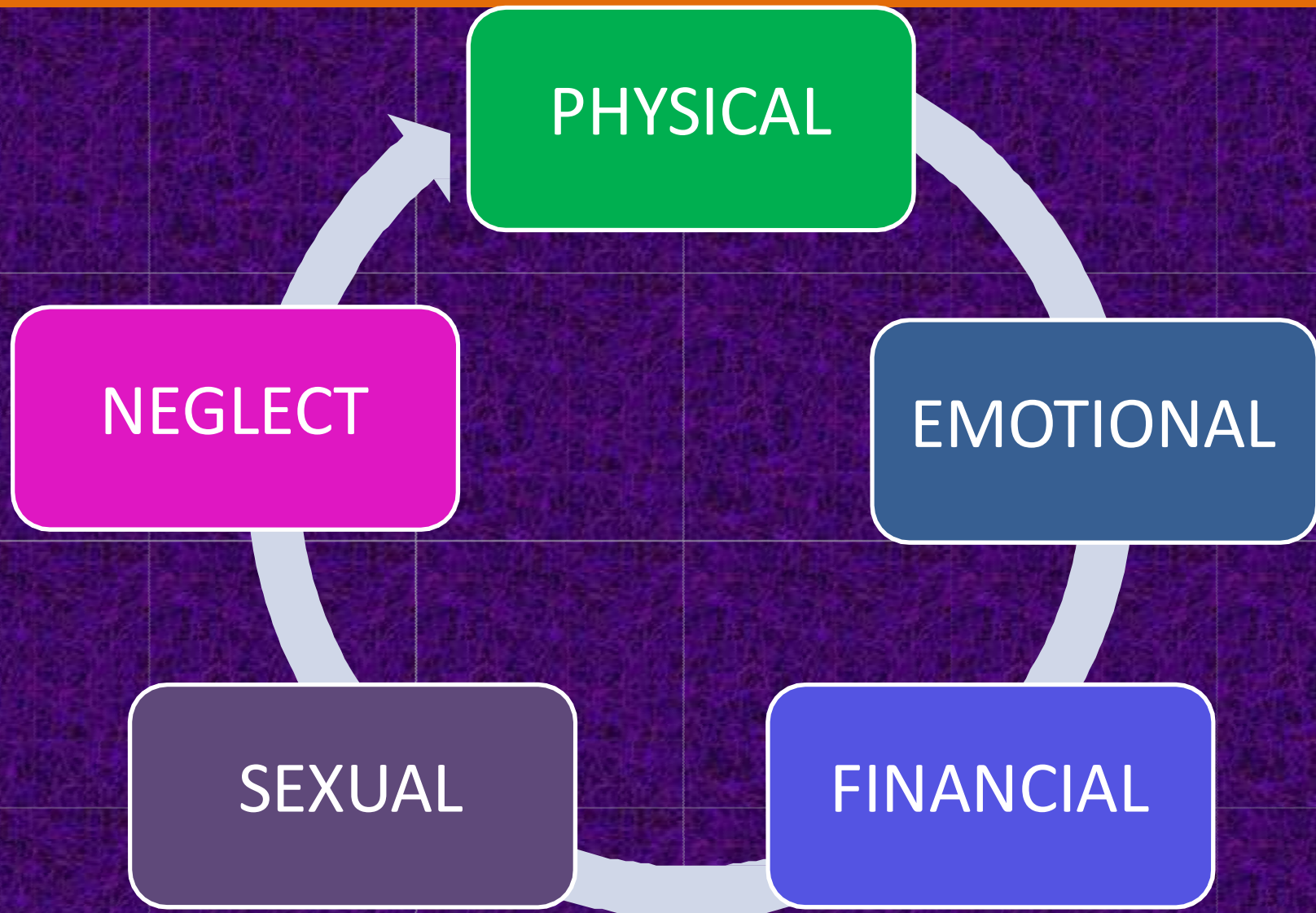




- **Abuse:**

- Elder abuse is a general term used to describe certain types of harm to older adults. Other terms commonly used include: "elder mistreatment", "senior abuse", "abuse in later life", "abuse of older adults", "abuse of older women", and "abuse of older men".

TYPES



- Physical abuse: (hitting, slapping, burning, pushing, restraining or giving too much medication or the wrong medication)
- Psychological abuse: (shouting, swearing, frightening, blaming, ignoring or humiliating a person)
- Financial abuse: (the illegal or unauthorized use of a person's property, money, pension book or other valuables)
- Sexual abuse: (forcing a person to take part in any sexual activity without his or her consent - this can occur in any relationship)
- Neglect: (where a person is deprived of food, heat, clothing or comfort or essential medication)
- An older person may either suffer from only one form of abuse, or different types of abuses at the same time

Physical health problems among older adults:

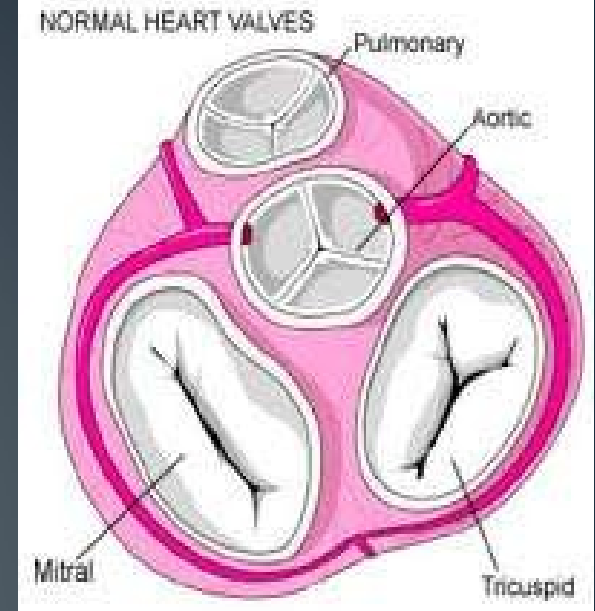
Cardiovascular system

Common health problems:

- Hypertension
- Ischemic heart disease
- Heart failure
- Peripheral vascular disease
- Varicose veins
- Stroke attack

Nursing intervention:

- Exercise regularly, pace activities
- Avoid smoking
- Eat a low fat, low salt diet
- Weight control
- Check blood pressure regularly
- Participate in stress reduction activities
- Regular medication



RESPIRATORY SYSTEM

Common health problems

- Chronic pneumonia
- Obstructive pulmonary disease
- Dyspnoea
- Breathlessness

Nursing intervention

- Deep breathing exercise regularly
- Avoid smoking
- Take adequate fluids
- Prevent pulmonary infections
- Avoid crowds during cold and flu season
- Wash hands frequently



NEUROLOGIC BEHAVIORAL:

Common health problems:

- Parkinsonism-characterized by tremor, rigidity, slowness of movement
- Alzheimer disease- loss of short term memory, deterioration in behavior and slowness of thought
- Dementia- it is a chronic or persistent disorder of behavior and higher intellectual function due to organic brain disease.
- Depression, anxiety
- Sleep disturbance

Nursing intervention:

- Advice for hospitalization and encourage visitors
- Teach fall prevention technique
- Environmental safety like sufficient light, proper chairs for seating, elevated toilet seats
- Encourage slow rising from a resting position
- Reduce the risk of falls

GASTROINTESTINAL SYSTEM:

Common health problems:

- Problem with speech, chewing and swallowing
- Constipation
- Colon gas and fecal impaction
- Diarrhea
- Gastro esophageal reflux or hernia
- Fecal incontinence, prolapsed rectum
- Dysphagia, anorexia

Nursing intervention:

- Use ice chips
- Mouth wash, brush, massage gums daily
- Eat small quantity, frequent meals
- Eat high fiber, low fat diet, limit laxatives
- Toilet regularly
- Drink adequate fluid
- For appetite serve food attractively and different types of foods

URINARY SYSTEM

Common health problems:

- Renal insufficiency
- Urinary incontinence
- Urinary tract infection
- Enlarged prostate
- Sexual dysfunction

Nursing intervention:

- Regular supervision is necessary
- Ready access to toilet
- Drink adequate fluids
- Avoid bladder irritants e.g. alcohol, caffeine
- Practice pelvic floor muscle exercise
- Maintain perineal hygiene
- Skin should be clean and dry. Apply cream
- Clean underclothes

REPRODUCTIVE SYSTEM:

Common health problems:

- Female- breast cancer, cervical cancer
- Painful intercourse
- Vaginal bleeding, vaginal itching and irritation
- Male- prostate cancer
- Delayed erection

Nursing intervention:

- Health and sexual counseling
- Advice about personal hygiene



MUSCULOSKELETAL SYSTEM:

Common health problems:

- Paget's disease
- Osteoporosis
- Osteomalacia
- Rheumatoid arthritis
- Spondilosis
- Complaints of back pain and joint pain
- Stiffness of joints
- Fractures
- Foot pathology gait disturbance

Nursing intervention:

- Exercise regularly
- Eat high calcium diet
- Limit phosphorus intake
- Hormones and calcium supplements may be prescribed

SPECIAL SENSE: VISION AND HEARING:

Common health problems:

- Visual impairment
- Hearing impairment
- Diminished smell or taste

Nursing intervention:

- Wear eye glasses or sun glasses
- Use adequate indoor lighting with area light and night light
- Use magnifier for reading
- Use large lettering to label medication
- Avoid night driving
- Advice for hearing examination
- Allow the individual more time to adjust to the environment
- Use gestures and object to help with verbal communication
- Speak slowly and clearly

DERMATOLOGIC:

Common health problems :

- Pressure sores
- Herpes zoster
- Dermatitis
- Pruritus
- bone structure is prominent

Nursing Intervention:

- Avoid solar exposure
- Cloth dress appropriately for temperature
- Maintain a safe indoor temperature
- Bath only 1-2 times weekly
- Excessive use of soap should be avoided
- Apply cream for lubricate skin

HEALTH PROMOTION IN ELDERLY

- **Introduction :**
- Health maintenance and health promotion is very important. In health care of elderly following points are included:
 - Exercise and activity:
 - Nutrition and diet:
 - Stress management:
 - Self care and responsibility :
 - Community services:

- **Exercise and activity:**
- Balance between exercise and activity is most important for elder person as it decrease risk of many health issues. Exercise also improve nutrition and reduce stress. In addition it decrease risk of hypertension or maintain blood pressure in hypertensive elder person. It increase oxygen saturation and increase lungs capacity. Elder person should do exercise on regular basis as tolerated. They should do light exercise like walking and slow running.

- **Nutrition and diet:**
- Maintenance of nutritional status in elder persons are also important because with increase in age digestive capacity diminish. The nutrition should be well balance that has higher amount of calcium, iron and other essential nutrients. Following things should be considered by elder person regarding diet
- Meal time should be kept simple and calm.
- Food is cut in to small pieces to prevent choking.
- Liquids food may be easier to swallow.
- Temperature of the food should be checked to prevent burns.
- Encourage for good mouth care.
- Avoid alcohol.
- Review all prescription and over the counter medication with patient and evaluate nutritional status.

- **Stress management:**

- By the time individuals reach 60-70 yrs of age , they have experienced numerous losses, and stress has become a life long process. In addition hormonal changes also cause stress among elderly. So stress management is essential for them. Long term stress cause hypertension, stroke and heart disease. Explain older person about stress management techniques like yoga, exercise meditation etc.

- **Self care and responsibility:**
- Older person also need to learn about self care and responsibility. So following instruction can be given to them about self care:
- Monitor blood pressure and blood sugar regularly.
- Diet control and balance diet.
- Stop alcohol consumption and smoking
- Get vision and hearing checked periodically.
- Advice to take proper rest and sleep.
- Exercise regularly.

- **Community services:**

- Many community supports exist that help the older person maintain independence. Informal sources of help, such as family, friends, the mail carrier, church members, and neighbors, can all keep an informal watch. Area Agencies on Aging perform many community services, including telephone reassurance, friendly visitors, home repair services, and home-delivered meals. Homemaker and chore services can be obtained at an hourly rate through these agencies or through local community nursing services.

- Most commonly used services are as follow:
- Group counseling centre
- Adult day centre
- Rehabilitation centre
- Hospice care
- Ambulatory care centre

Assignment

What is role of family member in care of elderly?





**Thank you
for your attention**

