

Aging or growing older is inevitable. In the U.S., the fastest-growing age group is 85 and older. What does being older mean? What is known about the aging process? Knowledge and beliefs about aging shape how we age and how we treat others who are older. Take the following quiz to see how much you know about aging. Correct answers follow the questions.

QUESTIONS

- True False** 1. Normal aging causes a slowdown of bodily functions while disease leads to a temporary or permanent breakdown in functioning.
- True False** 2. Everybody ages in the same way.
- True False** 3. As we age, the pupil of the eye becomes smaller and the field of vision shrinks.
- True False** 4. Hearing loss due to aging is different for men versus women.
- True False** 5. At 30 years old, a person has 245 taste buds per papilla; at age 70 the number of taste buds per papilla is 88.
- True False** 6. There is a tremendous change in the sense of smell as we age.
- True False** 7. The skin's sensitivity increases as one ages.
- True False** 8. Lung capacity lessens and respiration decreases with age.
- True False** 9. Very few changes occur in the digestion process that are directly related to aging.
- True False** 10. Metabolism slows down as we age.
- True False** 11. Illness and disease affect sexual activity more than the aging process itself.
- True False** 12. Generally, a man will lose 10 pounds of muscle between the ages of 30 and 70.
- True False** 13. Bone density decreases with age.
- True False** 14. Loosing teeth is part of the aging process.
- True False** 15. The amount of blood the heart can pump decreases by about 25 percent between the ages of 30 and 70.
- True False** 16. Normal aging is not linked to a loss of intelligence.
- True False** 17. Older adults will be able to recall past events more vividly than recent ones.
- True False** 18. If one can cope successfully with change and loss one will continue to grow.
- 19.** Coping successfully with change and loss involves:
 A. Feeling good about oneself
 B. Giving and receiving help
 C. Accepting others as they are
 D. Doing everything for oneself
- 20.** Basic needs, no matter what one's age, are:
 A. To know one is loved, wanted and needed
 B. To be socially involved and have companionship
 C. To feel useful and be as self-sufficient as possible
 D. To be recognized for positive things one is able to do

- True False** 21. When people reach 65 years of age, they have approximately five years to live, on average.
- True False** 22. After age 65, most people are over the hill and on a downhill slide.
- True False** 23. You can tell a lot about a person just by knowing his or her age.
- True False** 24. Ask most older people, and they will say their health is excellent or good.
- True False** 25. Older people are set in their ways: “you can’t teach an old dog new tricks.”
- True False** 26. Normal blood pressure rates have changed in the past 20 years.
- True False** 27. Lack of bladder control is to be expected in later life.
- True False** 28. Older people require less sleep.
- True False** 29. Older people are fearful of death.
- True False** 30. People become more religious as they age.
- True False** 31. It is normal for an older person to be depressed.
- True False** 32. Drug misuse and abuse are problems among older people.
- True False** 33. Most older people are in nursing homes.
- True False** 34. Most older people are lonely and want to live with their children.

ANSWERS

1. **True**
There is a difference between changes that result from normal aging and changes due to disease. Physical changes that are part of the normal aging process happen to everyone, are not reversible and usually do not cause serious disability. Physical changes due to disease are often treatable and may be reversible, but in some instances may result in serious disability. Generally, changes due to

normal aging cause a slowdown of bodily functions, while disease leads to temporary or permanent breakdown in functioning.

2. **False**
The aging process is as diverse as the people who go through it. Aging is a highly individual experience, and people age at different rates. Aging is a natural process that begins at conception and continues throughout the life cycle. Genetics, nutrition, stress, exercise, health care and lifestyle all influence the aging process. Most older adults are in good health. Physiological, sensory, emotional and physical changes occur, but the human body and its ability to compensate for these changes often allows older people to function effectively into their later years.
3. **True**
Even without disease, the eye is among the first of the senses to be affected by aging. The lens and cornea become less transparent, the pupil becomes smaller and the field of vision shrinks. Focusing becomes less acute, and the ability to shift focus from near to far, and vice versa, decreases. Seeing eye spots increases. The ability to distinguish between greens and blues diminishes because the lens of the eye begins to yellow. As a result, older people may need more light to complete tasks or to read.
4. **True**
Hearing loss generally becomes evident from middle age onward. This loss appears to be caused by a decrease in the elasticity of the eardrum. Men often lose the ability to hear high tones; women lose the ability to hear low tones. Men also have a higher risk of hearing loss than women.
5. **True**
The sense of taste starts to diminish around the age of 50. Very slight changes occur over the next 20 years of a person’s life. At 30 years old, a person has 245 taste buds on each of the tiny bumps (called papilla) on the tongue. At 70, the number of taste buds per papilla decreases to around 88. Sweet and salty tastes seem to be the first affected. For older persons, normal seasoning may seem bland. Using herbs (instead of salt) may be one way to boost the taste of foods without added sodium. This is especially helpful for older persons who have high blood pressure.

- 6. False**
Very few changes occur in the sense of smell as one ages.
- 7. False**
The skin's sensitivity decreases as one ages. The skin becomes less taut, shows pigment changes and has a loss of elasticity. Tissue loss occurs just below the skin. Because the skin loses sensitivity, an older adult may not feel pain until the skin has already been damaged. This can happen when an older adult uses a hot water bottle, for example, or is burned while cooking.
- 8. True**
Respiration rates decrease with age. In addition, lung capacity lessens because the muscles and rib cage that control breathing stiffen. It takes more effort to move air in and out of the lungs and more air is left in the lungs after exhaling. Studies show that the amount of oxygen to blood transfer also decreases with age. Less oxygen going to the bloodstream means the person has less fuel to do work.
- 9. True**
Very few changes occur in the digestion process that are directly linked to aging. Nutrients still tend to be well absorbed and digested. Some evidence suggests that the older stomach produces less hydrochloric acid, which is used to digest food. Poorly fitting dentures and less mouth saliva may make chewing harder for the older adult, which can also lead to poor digestion.
- 10. True**
Basal metabolism, the rate at which the resting body converts food into energy, slows down as one ages. This means older people may need less food than when they were younger.
- 11. True**
Reproduction and sexual activity undergo changes as we age. Sexual activity may decline in later years, often because people become interested in other aspects of living. Illness or disease will affect sexual activities more than the aging process itself. Both men and women tend to take longer to achieve orgasm as they age. For women, the end of menstruation signals a new era in their lives. The "change of life," or menopause, is caused by a decline in hormonal production and usually occurs between the ages of 45 and 50. With menopause, women may experience a thinning of the vaginal lining and less lubrication. The cervix and uterus tend to shrink. The vagina loses some of its elasticity. Men's reproduction capacity remains viable even into old age. Men tend to take longer to achieve a full penile erection but, once achieved, the erection can be maintained longer. However, they may not feel as much for as long as when they were younger.
- 12. True**
A person's strength generally peaks around 30 years of age and then gradually diminishes. Life style and activity levels can mitigate some of the muscle loss associated with aging. Generally, a man will lose 10 pounds of muscle between the ages of 30 and 70. The cells that replace the muscle fibers are connective tissue (collagen) or fat, which causes the muscles to stiffen and to become slower. Because collagen makes motion more difficult, an older person may not want to be physically active.
- 13. True**
A decrease in bone density and deterioration of spinal discs cause shrinking with age. A 5'10" man at 30 years of age will probably shrink to 5'9" by 70. Respiration, walking, stability and digestion can be affected by this change. Bones become more brittle and are more apt to break as one ages. This brittleness occurs because of a decrease in bone calcium content, which causes the bones to be thinner and more porous. The incidence of arthritis, an inflammation of the joints, increases with age.
- 14. False**
Very little change happens to the teeth. However the enamel on the tooth surface and the dentin underneath the enamel tend to decrease. These changes do not cause tooth loss. The loss of teeth often occurs because of disease or neglect.
- 15. True**
The heart becomes less efficient as one ages. The amount of blood the heart can pump decreases by about 25 percent between the ages of 30 and 70. The heart must work harder to support bodily functions. Arteries often become clogged because of a build-up of cholesterol and other fatty deposits. This build-up causes a narrowing of arteries and may lead to hypertension or high blood pressure.

16. True

Normal aging is not linked to a loss of intelligence. Certain chronic, mental or organic diseases may, however, interfere with normal intellectual functioning.

Profound loss and depression can account for an older adult not wanting to be challenged mentally. Impaired intellectual function in older adults happens because of certain abnormal conditions. The term “senile dementia” refers to a progressive and disabling disease that often leads to a shortened life span. Senile dementia is often caused by arteriosclerosis, heredity or environmental pollutants. Less than 10 percent of older adults in the U.S. suffer from this condition. Alzheimer’s disease is a type of dementia caused by a deterioration of brain cells. What causes the deterioration is unknown. Alzheimer’s strikes adults as young as 40 years of age and is characterized by behavioral and personality changes, worsening memory and disorientation.

Some loss of brain cells does occur with aging, but it has few effects on the brain’s ability to function. Unless you have a major illness, you can expect your mind to be alert and active well past 80. When intellectual functioning does decline, it usually is a result of health problems and often occurs shortly before death. Such sudden deterioration in intellectual functioning has been called “terminal drop.”

Many intellectual functions such as reasoning, vocabulary and special skills in which you remain actively involved often improve with age. If you are healthy and active, you can expect “crystallized intelligence,” the ability to use accumulated knowledge to solve problems and make decisions, to increase steadily through life. You may experience some decline in “fluid intelligence,” which is related to speed and similar functions. However, these changes have few effects on learning and everyday functioning. In later life, we tend to learn more slowly than we did when we were younger, but we can learn just as well. Like other parts of the body, your brain’s ability to function remains best when it is used regularly.

17. True

Many people worry that growing older means losing the ability to remember, think or reason. Memory loss is not normal in later life. Some change in the ability to recall recent information is common. This may be because “old memories” stored in the brain interfere with the recall of

new information. Think of your brain as a library in which you are looking for a particular book. If it is a young library with only a few books, the one you seek will be easy to find. If it is an older library full of thousands of books, finding a particular book will take longer. The book is still there if you take time to look for it. Patience is required to locate a certain book in a “large and full library.”

Anxiety, fatigue, stress and grief can also affect memory temporarily. These factors can interfere with taking in, retaining or retrieving information. Depression interferes with concentration and keeps information from being comprehended in the first place.

Often, an older adult will be able to recall past events more vividly than recent ones. However, a lack of remembering often stems from not listening carefully, from distractions and from not knowing how to remember. Memory aids can help improve short term memory. Techniques for remembering include ideas such as writing notes about things to remember and sticking them on the refrigerator, developing a routine such as parking in the same place or putting keys in the same place, organizing papers in files so they are easy to find when you need them.

18. True

Aging does not have to be a process of decline; it can be a process of becoming, of continuing to meet life’s challenges and of growing into a complete human being. The second half of life brings many changes: new career, retirement, widowhood, a new home, an “empty nest.” Many of these changes bring new freedom and opportunities. Although these changes may open new horizons, many of them also involve loss. Each change, even when accompanied by loss, offers the opportunity to grow. If you can cope successfully with change, you will continue to grow.

19. A, B, C

Feeling good about oneself is part of coping successfully. People who cope with change know their own abilities and limits and want to make their own decisions. They do as much for themselves as possible but are not reluctant to ask for help when they need it. Coping involves giving and receiving help as well as enjoying and accepting others as they are.

20. A, B, C, D

The basic needs of older people are no different than those of a younger person.

Four basic needs, in addition to food and shelter, are central to the life experience and must be met for an older person to remain healthy. First, each person must know that they are loved, wanted and needed. Second, though the world of an aging person may become much narrower, the individual must continue to be socially involved. Companionship is important. As people become older, they may feel they are of no use. They may not be able to work or sometimes may not even be able to care for themselves. Third, older people need to feel useful. Meaningful activities that encourage self-sufficiency should be encouraged. Finally, older people need to be recognized for the positive things they are able to do. We all want to be accepted as we are.

Before you can improve your relationship with an aging family member, loved one or friend, you need to acknowledge your feelings about their aging process. Once you understand your own reactions to aging, you can begin to understand how and why the older person reacts the way they do. With this information, you can begin to make the changes necessary to improve your relationship with them. Try to remember to build on the older person's strengths. Be available to the older person and listen when they express feelings of loss. It is important to be honest with your aging family member, loved one or friend. Saying what you feel or think means sharing your inner thoughts in a constructive way. This can be a little risky, but it shows that you trust and respect them and the role they play in your relationship.

21. False

Men who are 65 now can expect to live an additional 15 years on average. Women who are 65 now can expect to live an additional 19 years on average. The beginning of a newspaper article describing 105-year-old George Fugate read: "He didn't have a regular doctor until he was 100. A checkup showed he was in fine health, just getting old."

22. False

The later years may bring a downhill slide for some, but many older people find the changes aren't all in one direction. Gerontologists have discovered that some of the problems that occur in the later years can be prevented or even

reversed by changes in behaviors (especially diet and exercise), good relationships, positive thinking, meaningful roles or timely professional treatment. Studies have shown that even nursing home residents in their 90's can gain strength and flexibility from supervised exercise.

23. False

Knowing that someone is over 65 tells little about that person. Research has shown that there is at least as much, if not more, variety among older adults than among younger adults. Today's older American population includes: men and women of several generations, national origins and cultural backgrounds; healthy marathoners; severely impaired people; farmers and city dwellers; and a variety of other groups.

24. True

It is a misleading stereotype that many older people are in poor health and frequently complain about it. More than two out of every three older people living in the community (not in nursing homes) rate their health as excellent, very good or good.

25. False

History provides some memorable examples of late bloomers who reached new peaks in their careers or pursued new and fulfilling activities in their later years. For example, Grandma Moses took up oil painting at age 76 and continued until age 101. Some say that architect Frank Lloyd Wright did his most creative and prolific work from age 69 to his death at age 91. Abraham Goldstein, who at 101 was perhaps the oldest active professor in the country, had been teaching at Baruch College in New York since 1930. Senator John Glenn, who was an astronaut when he was younger, returned to space at age 77. Today, many people are starting second careers or taking on new hobbies or classes in retirement. Studies have shown that the capacity to learn new things does not usually diminish with age.

26. True

Normal blood pressure rates have changed in the past 20 years. If you were 60 years old and had a blood pressure reading of 160/90, 20 years ago you would be told that was normal for someone your age. Today you would be asked to exercise, eat healthfully to reduce your blood pressure, maybe even prescribed medication to reduce your

blood pressure because it is known that blood pressure at or above 160/90 is associated with the risk of stroke, heart attack and kidney disease.

27. False

In general, older adults experience very few bowel changes. However, they may have less frequent bowel movements because they're less active and don't eat as much. Not everyone needs daily bowel movements for good health. Aging does affect kidneys and bladder capacity, however. The kidneys of a 75-year-old will filter about half the amount of blood as a 30-year-old. The bladder capacity in an older adult is also about half that of a younger person (about two cups in a 30-year-old and one cup in a 70-year-old). The smaller bladder capacity results in more frequent urination. A decrease in muscle tone may also result in incomplete emptying of the bladder.

Many older persons may experience incontinence. This is especially common for older women who have had many children. Older men may have a hard time starting or maintaining a urine stream or fully emptying their bladder because of an enlargement of the prostate.

Urinary incontinence is neither normal nor inevitable in later life. However, it is more common among adults 65 years of age and older. Women, in particular, are affected. Urinary incontinence affects 15 percent or more of older adults who live at home and up to 60 percent of people living in nursing homes. It is one of the most common reasons for nursing home admission.

Eighty percent of urinary incontinence cases can be cured or significantly improved, yet half of the people affected never seek medical help. Because of the stigma associated with incontinence, people who lose bladder control often restrict outings and social activities. They fear they will "have an accident" or that others will smell the odor of urine. A vicious cycle can develop: Incontinence leads to isolation and inactivity, which may lead to depression, which further increases isolation. Incontinence can be effectively managed, so seek medical help.

28. False

The quality of sleep may decline in later life but not total sleep time. As people age, sleep tends to become more fragmented with more frequent night awakenings, even in healthy, active, older adults. Some people find that brief naps or rest

periods, regular exercise, good diet, good mental health and limiting alcohol intake promote healthful sleeping patterns.

29. False

Many people believe that because older people are closer to death, they are more fearful of death. In general, older people tend to approach dying in much the same way as they have approached life. The majority are not afraid of or preoccupied with death. Only about 10 percent of older people express a fear of death. For many older people, their great fears are a prolonged illness and loss of mental functioning.

Death is a reality for older people as friends and family members die. It is normal and healthy to face this reality and talk about it at times. It's important not to confuse talking more about death with being fearful.

30. False

People do not become more religious as they age. Religious beliefs and practices are established early in life and tend to remain fairly stable into later life. When compared with the present younger generation, today's older generation was more religious in their youth and have continued the religious path established early in life. Even among today's older population, there is great diversity in religious beliefs and practices, ranging from no belief in religion to active dedication to a major religion such as Christianity, Judaism, Buddhism or Islam.

31. False

Depression is not normal in later life, nor is it more common in later life than at other stages of life. One study of depression among the elderly found that 19 percent suffered from mild dysphoria or sad mood, and 8 percent were more severely depressed. Persons who are in long-term care facilities, who suffer from severe medical illnesses, or who are extremely isolated experience a significantly higher rate of severe depression.

Depression among older people often is overlooked or misdiagnosed. Sometimes the symptoms are not typically associated with depression. For example, some older people who are depressed will have impaired concentration and memory, and as a result may appear more confused than depressed. Physical illness can mask depression, and depression can mimic physical illness.

32. True

Studies show that 50 percent of older people fail to take their medications as prescribed. Also, many medications are not as well tolerated by the elderly, and changes occur in the body that may change the absorption, metabolism, distribution and excretion of drugs.

Drug misuse is important because of its effects on the health and brain functioning of older adults. An older person who takes multiple medications, perhaps several times a day for different health problems, is at greater risk for problems with medication. Common types of drug misuse among older adults are:

- **Overuse**—Taking more than a prescribed amount of a medication or taking medications that are not needed.
- **Underused**—Taking less than the prescribed amount of medication or not getting a prescription filled or refilled.
- **Erratic use**—Failing to follow directions, missing doses, trying to make up for a missed dose by doubling the next dose, or not remembering when or how to take medication.
- **Contraindicated use**—Prescribing by the doctor of an inappropriate medication.

Each of these types of drug misuse can be prevented by doctors and older patients working together. Patients always must be truthful about how they use or don't use their medications, and should expect their doctors to work with them to make medications manageable.

Alcohol is the most commonly abused drug by people of all ages in our society. Researchers estimate that as much as 10 percent of the older population has a problem with alcohol. However, alcohol abuse in later life often is overlooked. The signs of alcohol abuse may be attributed wrongly to "old age," physical illness or dementia.

Alcohol acts differently in older adults. Older persons cannot "clear" alcohol as fast, which means that they become intoxicated more quickly and their blood alcohol remains higher longer.

33. False

Only about 5 percent—1 in 20—of people over age 65 are in nursing homes or other institutions. However, the percentage increases with age. About 22 percent of persons over age 80 reside in care facilities. On the average, elderly persons in care facilities are older than elderly persons living in the community.

It used to be that when people entered a nursing home, they didn't expect to leave. Today, many people enter a nursing home to recover from an illness or surgery, or for rehabilitation, and then they return home. This is particularly common now that hospital stays have been limited by Medicare and private insurance payers.

34. False

Many older people do not report feeling lonely. Some researchers have found that people over age 65 are less likely to feel lonely than people under 25. However, limited hearing, vision and mobility do result in isolation and loneliness for some older people. As long as older people can manage independently, they prefer to live in households separate from their children. "Intimacy at a distance" is preferred both by older people and by their adult children.

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