



National Institute on Aging National Institutes of Health



We all know someone "old."

It might be a grandparent, a neighbor, or maybe the person behind the counter at the dry cleaners. So we all think we know a lot about growing old. But, what is normal aging? In this booklet, there are several very short stories, each followed by a few related questions. Some are multiple-choice, some are true/false (T/F), and some yes/no (Y/N). Test yourself to see what you know. Tear out the answer sheet on page 23, and then circle the answers you think are right. When you are done, compare your answers with the correct ones starting on page 10. Let's see how much you know about aging.

- Which of the following age groups is one of the fastest growing segments of the American population?
 - a. babies and children under age 5
 - b. children age 15 to 19
 - c. people over age 85

Phyllis is 65. Recently, she had a

DXA-scan to check her bone density.

The results showed she was at risk of a hip, wrist, or spine fracture because she has osteoporosis. Her doctor wants her to start doing weight-bearing activities to increase the density of her bones and balance exercises to help her avoid falls.

In addition, the doctor suggested she get her husband to do those activities with her to protect his bones.

A program of 30 minutes of moderate-level activity on most days of the week might also help prevent heart disease in both of them.



- Should her husband worry about his bones? Y/N
 Do men get osteoporosis also? Y/N
- 4. Does Phyllis have to worry about heart disease too? Y/N

Sylvia is 65. She has smoked cigarettes since she was 20. Her children and grandchildren all want her to quit. But several

members of Sylvia's family died of lung cancer in their old age. She believes it's too late now to make a difference.

- Even if an older person has smoked tobacco his or her whole life, it still makes sense to quit. T/F
- Getting tested for cancer can be just as important when people are older as when they are younger. T/F

Is cancer still a major cause of death in older people?

- 7. In 2006, heart disease was the number 1 cause of death. What was number 2?
 - a. stroke and related diseases
 - chronic respiratory disease, such as chronic bronchitis, emphysema, and asthma
 - c. cancer

Harry is 80 and seems depressed lately. His wife has noticed a change in his mood around the house and is concerned. He has always loved to drive his car. But, lately, he's worried when he gets behind the wheel. His vision seems to be changing. Last week he almost hit a messenger on a bike. The eye doctor says he has a cataract in one eye and needs surgery.

- 8. Is cataract surgery likely to help Harry see better? Y/N
- Since he is 80, will Harry have to stop driving his car anyway? Y/N
- Depression isn't normal at Harry's age.
 Maybe he needs to see a doctor. T/F



Sam is 70. He can't understand why
he is more tired than he used to be.

He goes to bed and gets up at the same time he always has. He often takes an afternoon nap.

Maybe it's because he has a lot on his mind right now. His younger

brother was just diagnosed with Alzheimer's disease. Sam's worried because he seems to be more forgetful than before—even a little confused sometimes. Could he have Alzheimer's too?

- The older a person gets, the less he or she needs sleep. T/F
- Forgetfulness and even a little confusion could come from a variety of causes, not necessarily Alzheimer's disease. T/F
- Could Sam develop Alzheimer's disease like his brother has? Y/N

Osteoporosis, heart disease, eye problems, trouble sleeping—just to name some of the things we've discussed. No wonder older people seem to take a lot of medicine!

- 14. Which age group uses the most prescription medicines?
 - a. Under age 18
 - b. Age 18 to 44
 - c. Age 65 and older

Marvis 66. Her husband had a heart attack and died two years ago. She's gained weight in recent years although her eating habits haven't changed. This makes her wonder if she is still attractive. Last month George, a man she met in her local senior center, asked her out. After a few dates, he suggested they become more intimate. Her husband had lost interest in having sex several years before he died, so Mary was surprised, but also pleased. George added to her surprise by asking if she had been with other men and suggested they use a condom to avoid HIV/AIDS.

15. Why might Mary be gaining weight?

- a. Her body needs less food as she gets older.
- b. She is not exercising as much as in the past.
- c. Both of the above
- d. Neither of the above
- 16. Do people begin to lose interest in sex around age 50? Y/N
- 17. What is George thinking? Do older people really have to worry about getting HIV/AIDS? Y/N

Jim, 82, lives alone on a pension.

To save money in the winter he keeps his thermostat at 62°, even when it's freezing outside. Now it's summer, and he refuses to buy a window air conditioner. When the weather report predicted 100° heat, his son Bob offered to pick Jim up and let him spend the day in Bob's cool house. Jim was grumpy and refused to leave his home.

- Like Jim, most older people live alone.
 T/F
- 19. Do people always get grumpy as they age? Y/N
- 20. What about the heat? Can too much heat or cold be dangerous for older people? Y/N

It seems like older people often are sick and have trouble getting around. Or, is that just another myth about the aging population? Let's see.

- 21. Americans are actually living longer. But are older Americans also:
 - a. Healthier
 - b. Sicker and more disabled

Harriet is 68. She is always on the go—busy doing things around her house and managing the family finances. Lately she has been bothered more and more by urinary incontinence. Sometimes, she can't make it to the bathroom in time. Then last month, while hurrying to the bathroom, she slipped on a throw rug in the hall, fell, and broke her hip. She spent almost a week in the hospital and then several weeks recovering in a care facility getting therapy. Her husband had trouble at home finding what he needed to pay the bills.

- 22. Urinary accidents don't have to be a fact of life for older people. T/F
- 23. Older people can't help falling. T/F
- 24. Make sure someone you trust knows where all your important papers are. T/F



John, age 72, appears to be fairly healthy, but he takes several medicines regularly. There are pills for his high blood pressure, high cholesterol, and arthritis, plus a multi-vitamin. It's a little hard to keep track of them all. What he would really like is a "fountain of youth" pill. Maybe he'll try some of those dietary supplements. His daughter says exercise, eat well, and keep your mind active—you'll stay young at heart. She wants him to get a computer and learn how to email his grandchildren. He says, "You can't teach an old dog new tricks."

- 25. John should check with his doctor before trying a dietary supplement. Even though they may claim to be natural, does that mean safe and effective? Y/N
- 26. Older people can't learn new things. T/F
- 27. Is there a "fountain of youth" treatment?
 Y/N

So, since more Americans are living longer, will there be many more people who are 100 or older in the future?

- 28. In 2007 there were an estimated 80,771 centenarians, people over the age of 100, in America. The estimated number of centenarians in the U.S. in the year 2050 could be:
 - a. 112,000
 - b. 238,000
 - c. 600,000



Answers

- 1. C. Today, there are more than 6 million Americans 85 and older. That number is expected to more than triple by the year 2050, when the youngest baby boomers turn 86. That means there may then be more than 20 million people over age 85 in the U.S.
- 2. No. Physical activity at any age can help make the heart, lungs, and muscles stronger. It may also lower blood pressure and, depending on the exercise, might help slow bone loss. See the inside back cover to learn how to contact the National Institute on Aging for free information on exercise.
- Yes to both questions. Women are at 3. special risk for osteoporosis, but one in five Americans who have this disease or are at risk for developing it are men. Everyone can help prevent bone loss by eating foods rich in calcium and vitamin D and exercising regularly throughout life. Foods that have lots of calcium include milk and other dairy products, dark green leafy vegetables, salmon, sardines, and tofu. Activities like walking, biking, playing tennis, and dancing can also help. Medicines are available for those for whom diet

and exercise are not enough.

- Yes. Surprised? Heart disease is the 4. number one killer of both women and men. Everyone can lower their risk greatly by not smoking, following a healthy diet, being physically active, and keeping blood pressure and cholesterol levels under control.
- True. It's never too late to enjoy the 5. benefits of quitting smoking. Soon after stopping, people of any age have better blood flow in their arms and legs. In a few months, breathing should become easier. People feel better and could possibly live longer. They certainly save money. After a time, food may even taste better. These are just a few of the reasons why it's a good idea to quit no matter what your age. Of course stopping is hard, but there are more kinds of help available than ever before. Talk to your healthcare provider.
- True. Many older people can beat 6. cancer, especially if it's found early in the course of the disease. That means that testing in this age group can be useful.
- c. Did you expect cancer to be the 7. answer? Well, you were correct. If you combine deaths from all types of cancer, then cancer is the second leading cause of death in older people. But, those numbers could be lowered. With early testing and treatment many people with cancer can be cured or at least add years to their lives. So, be sure to have regular

checkups and go to your healthcare provider if you have any concerns.

- 8. Yes. More than half of people over age 80 have a cataract or had one removed in the past. A cataract clouds the lens of an eye. In cataract surgery the surgeon removes the cataract and puts in a new artificial lens. This is very successful at restoring sight. More than 90 percent of people say they can see better after this surgery, and it may make Harry a safer driver.
- 9. No. It is not possible to pick one age at which everyone is too old to drive. In general, older drivers—those over 65— are safe drivers. They drive fewer miles and avoid risky behaviors like speeding, drinking and driving, or driving at night, in heavy traffic, or on interstate highways. But, changes in how the eyes, ears, brain,



and body work may make things like yielding right-of-way, turning (especially left turns), changing lanes, and passing more troublesome for an older person behind the wheel. Some of the reasons for older drivers' problems cannot be changed, but others, like Harry's cataract, can. Older people should get their vision and hearing checked regularly. Older drivers like Harry might feel more secure about driving if they take refresher training to improve their driving skills.

10. True. For many people, their later years are an active, rewarding time of life. But others may become depressed. They could have trouble sleeping, remembering, or making decisions or could eat more or less than usual. If Harry's wife continues to worry about whether he is depressed, she should encourage him to see a doctor. Once the cause of depression is known, the problem can often be treated. Depression can be caused by medicine or by physical illness or stress. Family support, psychotherapy, or antidepressants may help. If someone seems to be depressed, he or she should get help from a doctor or mental health counselor. Depression is serious, but help is available.

11. False. In later life, it's the quality of sleep that changes, not total sleep time. Older people may have trouble falling asleep or staying asleep. They may nap more during the day than a younger person does. Waking up tired every day, however, is not normal and can be helped. Sam needs to check with his healthcare provider.

their memory as they grow older, and sometimes being forgetful or confused might be an early sign of dementia. But this does not always happen. Finding a hobby, keeping an active mind, eating well, and staying physically active might help many people remain alert and clear-headed. Sometimes, however, a

minor head injury, high fever, poor nutrition.

drug side effects, or depression, for example, can temporarily lead to confusion. When this happens, treating the problem may relieve the confusion. Other conditions, such as Alzheimer's disease, cause permanent damage to the brain and grow worse with time.

- 13. Yes. It's possible. Alzheimer's disease is one form of dementia, a brain disorder that makes it hard for people to carry out their daily activities. People with a family member with Alzheimer's disease can be more likely to develop it. But that is not necessarily the case. Rare forms of Alzheimer's, such as early-onset familial Alzheimer's disease, occur between the ages of 30 and 60. These arise because of certain genes that we inherit from our parents. The role of genes in late-onset Alzheimer's, which is by far the most common form and occurs later in life, is not as simple. At least one, and possibly several genes have been identified that might play a part in someone developing late-onset Alzheimer's. However, there is no obvious family pattern of inheritance. Instead, the gene or genes appear to increase someone's risk of developing Alzheimer's disease.
- and older take at least one prescription drug. But only 1 of every 4 people under age 18 and about 1 of every 3 age 18 to 44 do. Older people often have several health problems. More than one drug may be needed to treat them. They are also more likely to have a serious reaction to a drug. It's a good idea for everyone, no matter what age, to have an updated list of all prescription and over-the-counter medicines and

supplements they use. They should bring the list whenever they have an appointment with any healthcare provider. It's also wise to check with a doctor on a regular basis to make sure all drugs and doses still make sense.

- age. Along with changes in how the body uses food, older people are often less active. That means they usually need fewer calories—less food. But, a balanced diet is still important. So are valuable nutrients. An unplanned gain or loss of 10 pounds over 6 months is a reason to check with the doctor.
- 16. No. A slowing of sexual response is a normal part of growing older. But, many older people want and can lead an active, satisfying sex life. When problems develop, they may be caused by illness such as Mary's husband's heart disease, disability, or medicines. Often, something can be done—for example, treat the illness, change a prescription, try a different position, or see a counselor.
- of all people newly diagnosed with HIV/AIDS in the United States are 50 or older. This means that older people having sex need to take exactly the same precautions as younger people. They need to make sure their partners

are HIV-negative and free of other sexually transmitted diseases. And, they need to protect themselves by using a male or female latex condom during sex. If they use illicit drugs, they should not share needles or other materials.

- 18. False. Most older people are not alone. About 8 of every 10 older men and 6 of every 10 older women live in family settings—with a husband, wife, or other family members. Less than 4 percent of people over age 65 live in nursing homes.
- 19. No. Personality has long been considered one of the constants of life. That is, as people age, they are likely to behave much as they have their whole adult life. However, recent research suggests that your personality may change slightly as you grow older. While small variations in



personality are possible, major changes in personality are unlikely. For example, an outgoing, cheerful, assertive young person is probably not going to turn with aging into a solitary, cheerless, submissive older person. In the same way, a calm, easygoing person does not become a grumpy old person because of aging. So, it's possible that someone in their 60s, 70s, or 80s could become more conscientious and agreeable and less neurotic as they grow older. However, Bob needs to question why his dad is grumpier than usual. Perhaps it's the heat.

20. Yes. A change in behavior such as becoming confused or grouchy can be a sign of heat stroke during hot weather or hypothermia in the cold. Getting too hot or too cold can make it hard for people to keep their body temperature



around 98.6°. The brain works as the body's thermostat. For example, if a person gets too hot, the brain sends messages to glands in the skin to release fluids, the person sweats, and the skin cools down. If a person gets too cold, the brain sends messages to the muscles to start shivering, and that activity helps warm the person. With age, this thermostat in the body may not work as well as it did before. As a result, hot or cold weather is more likely to make an older person very sick more quickly. Bob should check on his dad often, try again to move him to someplace cool, and get him medical help if Jim does not seem better.

- 21. a. For several decades, the percentage of people age 65 and older with a disability has been getting smaller. For example, in 1982, 26 percent of Americans age 65 and older suffered a chronic disability, and by 2004, that percentage had fallen to 19 percent. Now, there are signs that this decline might be leveling off in people in their 60s, but not yet in older groups. Still, it is important to remember that disability can be reduced, even at advanced ages.
- **22. True.** Millions of older people, especially older women like Harriet, have urinary incontinence or bladder control problems. But these are symptoms, not a disease. Incontinence can be caused by infection,

disease or injury, or the use of certain medicines. No matter the cause, treatment can usually help. Not treating incontinence might lead to serious complications like Harriet's fall.

- 23. False. Falls are a common cause of injuries in people over age 65, but they don't have to be. It is important to take steps to avoid falling. Vision and hearing should be checked regularly. There are ways to make sure the home is safe.

 Loose rugs, like the one Harriet slipped on, should be fastened down or removed, and electrical cords should be put out of the way. Some medicines can affect balance and coordination.

 A doctor can talk about any side effects of medicines he or she prescribes.
- family or just a spouse or lives alone with no relatives nearby, he or she needs to prepare for the uncertainties of the future. No one expects to be too sick to pay bills, take care of his or her home, or to say how he or she wants to be cared for. But, sometimes this happens. That's why everyone should make sure a trusted family member or friend knows where things like the checkbook, bills, a will, or an advance directive for healthcare decisions are kept.

- 25. No. We don't know which supplements are effective or even safe. Dietary supplements are big business today. Many different types are sold, and you don't need a prescription to buy them. And, no Federal agency has the job of checking the safety of these dietary supplements before they go on the market. In addition, the supplements' ingredients may have several effects on your body and can interfere with medications you may already be taking. Some have serious side effects. Let your doctor know which supplements you are taking, even vitamins.
- 26. False. People of any age can still learn. There is even research showing that older people can improve skills they've had for years, for example, driving. Older people can also learn new skills, like using computers to get information and keep in touch with their families.



- 27. No. Scientists have not found a magic drink or pill that will prolong lives. Aging is a complex process. There are things people can do to stay healthy and active as they age. John's daughter was on the right track. Eating a balanced diet, keeping mind and body active, not smoking, getting regular checkups, and practicing safety habits at home and in the car might help everyone make the most of life.
- 28. c. In 2007, using an estimate based on the 2000 census, the U.S. Census Bureau suggested there could be 600,000 centenarians in America in 2050. However, depending on changes in mortality rates at older ages and migration/immigration rates, the number could easily shift.



ANSWER SHEET

1. a. b. C. Y / N 2. Y / N Y / N 3. Y / N 4. T / F 5. T / F 6 7. a. b. C. Y / N 8. Y / N 9. T / F 10. T / F 11. T / F 12. 13. Y / N 14. a. b. C. a. b. d. **15.** C. Y / N **16.** Y / N 17. T / F **18.** 19. Y / N 20. Y / N a. b. 21. T / F 22. 23. T / F 24. T / F 25. Y / N T / F 26. 27. Y / N

28. a.

b.

C.

ANSWER SHEET

SHARE YOUR AGING IQ QUIZ WITH A FRIEND

b. 1. a. C. Y / N 2. Y / N Y / N 3. N 4. T 5. 6 T / F b. 7. a. C. 8. Y / N N 9. T 10. 11. Т 12. Y / N 13. b. 14. a. C. b. d. 15. a. c. 16. Υ / N Υ / N 17. / Т 18. F Υ N 19. Υ / N 20. b. 21. a. T / 22. F T / F 23. T 24.

26. I / F

28. a. b.

So, how did you do?

Did you already know everything Or, did some of the answers surprise you? How can you know that those surprising answers were actually true? All this information comes from the National Institute on Aging (NIA), part of the Federal Government's National Institutes of Health at the U.S. Department of Health and Human Services. The NIA conducts and supports research on aging and educates the public about our findings. More information about many of the subjects discussed in this aging IQ test is available from the Institute in a series of free fact sheets called *AgePages*. For a complete publications list, contact:

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