Answers
to Aging Quiz[1]

1. False. Almost 90% of people who are 65 years of age do NOT have Alzheimer's Disease.

2. False. Although there are some circumstances where the statement may hold true, current research evidence suggests that intellectual performance in healthy individuals holds up well into old age. The average magnitude of intellectual decline is typically small in the 60s and 70s and is probably of little significance for competent behavior. There is more average decline for most abilities observed once the 80s are reached, although even in this age range there are substantial individual differences. Little or no decline appears to be associated with being free of cardiovascular disease, little decline in perceptual speed, at least average socioeconomic status, a stimulating and engaged lifestyle, and having flexible attitudes and behaviors at mid-life. The good news is that research data now indicate that intellectual decline can be modified by modest interventions.

3. False. Although learning performance tends on average to decline with age, all age groups can learn. Research studies have shown that learning performances can be improved with instructions and practice, extra time to learn information or skills, and relevance of the learning task to interests and expertise. It is well established that those who regularly practice their learning skills maintain their learning efficiency over their life span.

4. False. Personality remains consistent in men and women throughout life. Personality impacts roles and life satisfaction. Particular traits in youth and middle age will not only persist but may be more pronounced in later life.

5. True. As one ages there is modest memory loss, primarily short-term memory (recent events). Older adults are more likely to retain past or new information that is based on knowledge acquired or builds upon their life course or events. Retrieval of information may slow with age. The causes of these changes are unknown, but may include stress, loss, physical disease, medication effects and

[1] This is the official answer sheet that accompanies "What Do You Know About Aging? A Quiz" as it appears on the Center on Aging Studies at the University of Missouri - Kansas City website at: http://cas.umkc.edu/cas/AgingFactsQuiz.htm

depression. Lack of attention, fatigue, hearing loss, misunderstanding are among factors impacting memory loss in persons of all ages. Strategies such as activity and exercise, association, visualization, environmental cueing, organization by category and connection to a place may help to prompt memory. New research has revealed that 40% of persons diagnosed with mild cognitive impairment (beyond what is expected for a person of that age and education) are likely to develop Alzheimer's disease within 3 years.

6. True and False. Reaction time is the interval that elapses between the onset of a stimulus and the completion of a motor response, such as hitting the brake pedal of a car when the traffic light turns yellow or red. When processing ordinary stimuli, adults do show large increases in response time with increasing age.

7. False. Depression does NOT occur more often in older adults than younger groups. However, it is the most frequent mental health problem of older adults. Depression may vary from feeling "blue" from grief over a loss to a diagnosis of clinical depression by the DSM IV criteria. Accurate diagnosis and treatment options are often hindered by the resistance to mental health intervention and situational depression in older adults as they react to isolation, role change, illness and medication effects.

8. True. Blood transfusions and unprotected sex put older adults at risk for HIV/AIDS as in other populations. It is estimated that as many as 10 percent of all persons diagnosed with HIV/AIDS are over 50 years of age.

9. False. There is no substantial support for this idea. A growing body of evidence suggests that, although the majority of older adults are not abstinent, the frequency and quantity of alcohol consumed tends to decrease with age. This is at least partially explained by changing patterns of sociability with age, age related health problems, and complications associated with alcohol interacting with prescribed medications. Problems with drinking later in life appear usually to be a continuation of drinking patterns established in the earlier adult years and not with late onset drinking. Therapeutic intervention is at least as effective with older adults as with adults generally.

10.True. Older adults are more prone to sleep complaints: insomnia due to changing sleep patterns of frequent awakenings, earlier rising, emotional problems. The quality of sleep declines with age. It becomes particularly more difficult to stay asleep. Daily sedation, boredom, loneliness, illness, time changes, work schedules, physical changes and alcohol or

medication may affect sleep patterns. Sleep behaviors common to older adults may include increased napping, periods of sleep apnea (stopped breathing), more frequent awakenings, lengthened onset of sleep, increased time in bed and increased total sleep time. Current research verifies that REM (sleep in which dreaming takes place) deep sleep, in older adults may be half what it is in younger persons.

11. True. The national suicide rate is about 12 per 100,000 population, while it is 1.3 for those aged 65 to 74 and 23 per 100,000 for those over age 85. It has been estimated that 17 to 25 percent of all reported suicides occur in persons aged 65 and older. (Hooyman, 178). However, older white males largely account for this high rate. For white women and for men and women of all other races, the suicide rate peaks earlier in the life span. Older adults also have a higher ratio of completed to attempted suicides than younger groups. The higher suicide rates might be explained by a variety of factors, including the loss of roles and status, chronic illnesses that diminish one's sense of control, and social isolation.

12. True and False. There is evidence that high blood pressure does increase with age. However, there is controversy over the criteria for high blood pressure. Studies and physicians differ in their definition of high blood pressure. Most consider a person's age plus 100 as a reasonable systolic reading with diastolic of 90 mm. The systolic (higher number) measure is the pressure when the heart is stressed as it contracts and is recorded when the pressure cuff is first released after being tightened. The diastolic (lower number) is the blood pressure when the heart is at rest and is derived when the blood pressure returns to normal after the first rush of blood upon release of the cuff. The Fifth Report of the Joint National Commission on Detection, Evaluation and Treatment of High Blood Pressure states young and old have the same blood pressure, so 140/90 is a standard benchmark. It is thought that more than 50% of persons over 65 years in industrialized society have greater than 140/90.

13. True. Perspiration and quenching of thirst help to combat overheating. Older adults perspire less, are less aware of thirst and less able to feel or adapt to extremes in temperature than younger persons. Less sensitive skin sensors and less insulation of fatty deposits under the skin and the less efficient functioning of the hypothalamus (the temperature regulating mechanism in the brain) occur in older adults. Prolonged time for older adults to return to core temperature after exposure to extreme heat or cold begins at age 70 years and increases thereafter. Education and taking precautions may prevent most deaths related to temperature extremes. Increased fluid intake, gradual accommodation to climate change, rest, minimizing exertion during heat, use of fans and/or air conditioning, wearing hats and loose clothing and avoidance of alcohol are some strategies for hyperthermia.

14. False. There is a gradual loss of bony tissue, which causes brittle bones that fracture more easily in both men and women as they age. Osteoporosis develops more often in women when calcium is lost (following hormonal change after menopause) or insufficiently taken and absorbed. Deficiency in bone mineral density occurs in 50% of women over 50 years to 57% of women 70 years or older, but decreases to 45% for those over 80 years. Women rarely develop osteoporosis until age 70 years. A test of bone density (absorptiometry) can measure bone mass by x-ray or computer analyzed e-ray. Prevention of osteoporosis begins with adequate Calcium intake in one's teens and thereafter with increased attention after menopause. Weight bearing exercise, hormone replacement therapy (HRT), decreased alcohol, protein, salt and caffeine consumption, smoking cessation and adequate Vitamin D intake may minimize bone loss. HRT may offer some protection against heart disease, cognitive impairment and bone loss, but also may present risks for cervical cancer. Risk factors of osteoporosis include excess alcohol, little physical activity, deficient calcium intake, no pregnancies, no breast feeding, fair complexion, blond or red hair and of European nationality.

15. True. Due to osteoporosis, osteoarthritis and a lifetime of wear and tear, upper vertebrae are weakened; joint spaces and buffering tissues wear and muscles are lost. These changes foster decreased padding between vertebral discs, which accounts for a loss of height. The height changes and imbalances contribute to pain and stress on the lower back with advanced age.

16. True. Muscle mass declines, cartilage erodes, membranes fibrose (harden), and fluid thickens. These contribute to stiffness, gait problems, lessened mobility, and limited range of motion. From age 30 years, muscle mass declines to almost 50% in old age. Research shows that weight bearing exercise, aerobics and weight resistance can restore muscle strength, increase stamina, stabilize balance and minimize falls.

17. False. Recent studies validate that more than 70% of men and women continue sexual activity after 65 years. Men and women over 70 are still considered potentially "sexy," Reasons for limited sexual activity include loss of partners, illness and medications. Most older adults consider intimacy crucial to relationships and emotional well being. Intimacy may be satisfied by other means than

sexual relations, such as touch, hugging and holding.

18. True. The muscle of the bladder loses elasticity and tone. Hence, the bladder holds almost 50% less urine (causing more frequent urination) and empties less completely. The warning period between the urge and actual urination is shortened or lost as one ages. Muscular disability, spinal cord effects on the bladder muscle, tumors, infection, anatomic damage to the sphincters and/or bladder neck may cause incontinence in advancing age. Other risks for incontinence in old age include chronic disease, cognitive impairment, medications, smoking, pelvic muscle weakness, low fluid intake and environment.

19. False. The *amount* of blood flow through the kidney and ability of the kidney to *filter* blood is about *half* that of younger ages. This is caused by the age related structural and anatomic changes within the kidney. Some studies show that as much as one third of older adults have no change in their urine creatinine (creatinine clearance is a measure of how well the kidney is able to filter the blood, the glomeruler filtration rate or GFR). However other studies show decline that begins at 40 years. Age related kidney changes create more risks for fluid and electrolyte imbalance and renal damage from medications or diagnostic contrast materials. Disease, surgery or fever may stress and interfere with the kidney's ability to regulate and excrete fluids and electrolytes particularly in older adults.

20. False. Cultural notions about "daily regularity" held by the current cohort of older adults makes the myths of constipation and the elderly seem more important and credible. However, age related changes in the gastrointestinal system are *less* responsible for constipation in older adults than factors such as activity, diet, and medication. Decreased intake and absorption of vitamins, proteins and other important nutrients and dental issues present greater health threats to older adults. Despite a decrease in gastrointestinal muscle strength and motility, lax sphincters, lowered digestive juices, the gastrointestinal system is better able to compensate for the harmful effects of these changes.

21. True. While there is considerable individual variation, on average sensory processes (vision, hearing, taste, smell, and touch) don't work as well as people get older. Another way to say it is that the threshold at which we take in stimuli increases

with age. The eye lens, for example, is less able to change shape so as to adjust to close and far objects, and the size of the pupil narrows so as to let in less light. Hearing loss begins at age 20, and for many involves growing inability to hear higher frequencies as sensory receptors in the ear and nerve cells in the auditory pathway to the brain are lost. Taste buds become less sensitive with aging, and after age 80 more than 75 percent of older adults show major impairment in their sense of smell. Many of these normal changes can be compensated for through increasingly sophisticated assistive devices (hearing aides, glasses, etc.) and through modifications of the older person's environment.

22. True. The incidence of acute or temporary conditions, such as infections or the common cold, decreases with age, although those that do occur can be more debilitating and require more care. Older people are much more likely than the young to suffer from chronic conditions. These are long-term (more than three months), often permanent, and leave a residual disability that may require long-term management or care rather than cure. More than 80 percent of persons age 65 and over have at least one chronic condition, with multiple health problems being common. Arthritis is the most commonly occurring chronic condition.

23. False. Health decline is related to age or previous health problems, not retirement per se. Retirement may actually improve functional health by reducing stress on the individual.

24. True. Although death in industrialized society has come to be associated primarily with old age, studies generally indicate that death anxiety in adults decreases as age increases. Among the factors that may contribute to lower anxiety are a sense that goals have been fulfilled, living longer than expected, coming to terms with finitude and dealing with the deaths of friends. The general finding that older adults are less fearful of death than middle-aged counterparts should not obscure the fact that some subgroups may have considerable preoccupation and concern about death and dying. Some fear the process of dying much more than death itself.

25. False. People over age 65 currently make up about 13 percent of the population. However, as the "baby boom" generation begins to turn 65 in 2011 the proportion of older adults will grow dramatically. It is estimated that by 2030 adults over 65 will compose 20 percent of the population

26. False. According to the U.S. Bureau of the Census, slightly over 5 percent of the 65 population occupy nursing homes, congregate care, assisted living, and board-and-care homes, and about 4.2 percent are in nursing homes at any given time. The rate of nursing home use increases with age from 1.4 percent for the young-old to 24.5 percent of the oldest-old. Almost 50 percent of those 95 and older live in nursing homes.

27. False. Evidence from several studies and national surveys indicates that families are the major care providers for impaired older adults. Families provide 70 to 80 percent of the in-home care for older relatives with chronic impairments. Family members have cared for the typical older adult who reaches a long-term care setting for a significant amount of time first. Research has shown that adult children are the primary caregivers for older widowed women and older unmarried men, and they are the secondary caregivers in situations where the spouse of an older person is still alive. Parent care has become a predictable and nearly universal experience across the life course, although most people are not adequately prepared for it

28. False. Remaining life expectancy at age 65 is about 4-1/2 years less for men than women. Women have an average remaining life expectancy of 19.4 years compared to 15.0 years for men. Overall life expectancy at birth is about 7 years greater for women (80.4) than men (73.5).

29. True. Although remaining life expectancy of black men and women at age 65 is about two years less than that of white men and women at age 65, by the time they reach 85 their life expectancy is nearly the same. One possible explanation for this convergence effect is that blacks who make it to the oldest ages do so in spite of many disadvantages and are "survivors" and have developed physiological and social psychological survival advantages.

30. True. Beginning in 1975 Social Security benefits are periodically automatically adjusted to inflation. Current law ties this increase to the consumer price index (CPI) or the rise in the general wage level, whichever is lower.

31. False. While the proportion of older people (65+) living below the poverty level has declined significantly since 1960 to about 10.5 percent, this index rather dramatically underestimates need. The poverty level is based on an estimate of the cost of items in the Department of Agriculture's least costly nutritionally adequate food plan and multiplied by three (suggesting that food costs represent one third of a budget). This is probably not a fair representation of living costs in many areas of the country, particularly urban areas. Therefore, gerontologists and economists also look atthe proportion near poverty level (up to 150 percent of poverty level) and find that nearly one quarter of older adults fall below this line. These older people tend to be disproportionately women, unmarried (including widowed, African American or Hispanic, and living alone.

32. True. Some older adults do have visual, motor, or cognitive impairments that make them dangerous drivers. Many drive more slowly and cautiously or avoid driving in conditions they consider threatening in order to compensate for these changes. Until approximately age 85 older adults have fewer driver fatalities per million drivers than men 20 years old, but they do have more accidents per miles driven. Unsafe speed and alcohol use are leading factors in accidents for young drivers, while right-of-way violations are the leading cause of accidents involving older drivers--which implies a breakdown in such cognitive-perceptual components as estimating the speed of oncoming cars or reacting too slowly to unexpected events. Older drivers' skills can be improved considerably by specific driver training such as through the AARP "55 ALIVE/Mature Driving" program.

33. False. Negative perceptions of older workers persist because of health issues, diminished energy, discomfort with technology, closeness to retirement, and reaction to change in the work place -- all associated with older adults. To the contrary, research identified characteristics of low turnover, less voluntary absenteeism and fewer injuries in older workers. Recent high ratings of older workers from employers cite loyalty, dependability, emotional stability, congeniality with co-workers, and consistent and accurate work outcomes. While more are retiring earlier and spending fewer years working, older workers will be in greater demand with dwindling entrants into the work force.

34. False. The majority of older people are not "set in their ways and unable to change." There is some evidence that older people tend to become more stable in their attitudes, but it is clear that most older people do change. To survive, they must adapt to many events of later life such as retirement, children leaving

home, widowhood, moving to new homes, and serious illness. Their political and social attitudes also tend to shift with those of the rest of society, although at a somewhat slower rate than for younger people.

35. False. Older persons are involved in many and diverse activities. After retirement many participate as volunteers in churches, schools or other nonprofit organizations and report themselves to be "very busy." As they age most persons are likely to continue the level of activity to which they were accustomed in middle age.

36. False. Older adults are at least as diverse as any other age group in the population, and on many dimensions they may actually be more diverse. People vary greatly in their health, social role, and coping experiences. As the older population becomes more and more ethnically diverse, differences could be even greater. It is very misleading to talk about older adults as "the elderly," for this term may obscure the great heterogeneity of this age group.

37. False. Although the media may leave the impression that older adults are a major target of violent crime, annual data from the national Crime Victimization Surveys consistently indicate that violent crime, personal theft, and household victimization rates for persons aged 65 and older are the lowest of any age group. Data indicate that this holds true for virtually all categories of criminal victimization: rape, robbery, aggravated assault, simple assault, and personal larceny without contact. Only for the category of personal larceny with contact (e.g., purse snatching and pocket picking) is the victimization rate higher for persons aged 65 and over compared to those aged 25 to 64. Nevertheless, the health and financial consequences may be greater for the older victim.

38. False. Studies have found *no* increase in average religious interest, satisfaction or activities among older people as they age. The present generation of older persons (cohort) tends to be more religious than younger generations due to their upbringing, i.e., *they have been more religious all their lives rather than becoming more religious as they aged.* However, research has indicated that religion does seem to become more important with age and older adults do rely on their faith to cope with losses.

39.False. Although several surveys show that fear of crime exists among some older

adults, there is no substantial evidence that older people are more likely to be afraid of crime that younger people are. One survey examined different types of victimization and found no increase in fear among older adults in any of the types. Studies that have shown an increase in fear of crime in later life possibly have used measures of questionable validity.

40. False. While some older people may experience a period of prolonged adjustment, there is no evidence that there is special harmfulness in elderly relocation. Studies of community residents and of institutional movers have found an approximately normal distribution of outcomes -- some positive, some negative, mostly neutral or mixed and small in degree. For many relocation brings a better fit between personal needs and the demands of the physical and social environment. Research generally has demonstrated that adjustment to residential relocation is determined, at least in part, by perceived predictability and controllability and by the similarity between the originating and receiving environments.

41. False. Women in their 30s and 40s comprise the greatest *number* of volunteers. However, forty percent of older adults volunteer. Older adults may be less likely to belong to organizations than younger persons, but more consistent in their activities and loyal to groups from middle age until their 60s. Volunteerism is correlated with life satisfaction, usefulness, physical and mental well being and a sense of accomplishment. Persons with higher education and income levels, histories of volunteerism and broad interests are more likely to volunteer. Health problems, lack of transportation and limited income may limit volunteer activities.

42. False. This view is based upon an early theory called "disengagement theory" which said that it is normal and expectable that the older person and society withdraw from each other so as to minimize the disruption caused by the older person's death. Although many people obviously do scale back certain activities, particularly if health deteriorates, there is substantial evidence that many who remain active and engaged have higher levels of function and happiness. For many staying involved physically, cognitively, socially, and spiritually in the social group is a basis for happiness.

43. True. Geriatrics refers to the clinical aspects of aging and the comprehensive health care of older persons. Study of geriatrics actually began in the early 1900s, although formal training in geriatrics is relatively new. A Certificate of Added

Qualifications (CAQ) in Geriatric Medicine or Geriatric Psychiatry is offered through the certifying boards in family practice, internal medicine, osteopathic medicine, and psychiatry for physicians who have completed a fellowship program in geriatrics.

44. False. Although a number of medical schools require course work in geriatrics/ gerontology, many still have only elective courses or no courses at all. Incentives in the form of materials support and grants have come to some medical schools to develop and institutionalize formal curricula from such organizations as the Association of American Medical Colleges, the American Geriatrics Society, and the Association for Gerontology in Higher Education, as well as foundations such as the John Hartford Foundation. Top-ranked medical schools for geriatrics training include Harvard, Duke, Johns Hopkins, Mount Sinai (NY, UCLA, University of Washington, Michigan, Wake Forest, Pennsylvania, and Yale.

45. False. The low numbers of reported cases of elder abuse belie the magnitude of elder abuse in this country. Latest figures estimate more than 551,000 reported cases of abuse (physical, verbal and sexual types of neglect or abuse) to persons over 60 years per year. (There are more than 30 million Americans over 60 years.) Actual reported cases represent a fraction of what is thought to occur due to perceived fearful consequences and inconsistent and inefficient report mechanisms. Self neglect and exploitative types of abuse, were not part of the above study and yet are more common. Men and women are equally culpable in the perpetration of abuse.

46. False. The longevity revolution has increased the number of three-, four-, and five-generation families. This, along with a growing incidence of divorce and remarriage, drug and alcohol addiction, AIDS, incarceration, and unemployment within the parental generation has resulted in grandparents stepping into the surrogate parent role with increasing frequency. Census figures estimate the number of grandchildren living with their grandparents (about one third without a parent present) to be as high as 5.5 million, with African American grandchildren being slightly more than three times more likely than their white counterparts to be in this type of living arrangement. There are grandparent-headed households in every socioeconomic and ethnic group.

47. True. Older adults do experience multiple losses of loved ones and friends, illness,

relocation, retirement, income, change and decline in abilities. It may take an older adult longer to adjust to a major change or recover from prolonged and intense physical and emotional stress. The recovery of an older body from a traumatic event may be delayed due to age related decreases in cardiac output and heart rate ad more vulnerability to disease with a less effective immune system. However, the many older adults who have developed active and healthy lifestyles may be able to resist/mitigate some of the negative effects of stress or illness due to their physiological fitness. Likewise, coping skills that have been honed during a lifetime may lessen the damage of psychological stresses and ease adjustments to loss and change.

48. True. The majority of older adults perceive their health to be good to excellent, as they do not compare their current condition to former states, but rather to their peers their ages and older who may be "worse off." The "ratings" are not a medical assessment. While chronic disease, frailty and disability are correlated with advanced age, the *Myths and Realities 2000* study discovered that 84% of all Americans would *like* to live to 90 years and half of persons over 65 years described their lives as "the best years of my life." Disease and disability are being delayed and functional levels are improving, especially in persons over 80 years. Less than 10% of non-institutionalized persons 70 years and over are unable to perform one or more activities of daily living (ADLs). Disability does increase to 22% for those 85 years and older.

49. True. In general women throughout adulthood are more likely to attend to minor symptoms than are men. Men are more likely to have been socialized even as children to be stoical, and consequently are less likely to see a doctor for nonferrous health problems. When they do get sick, they are likely to have more and longer hospital visits. Women, on the other hand, are more likely to have had regular contact with the health care system through childbirth, attending to their children's health, and having regular screening procedures for cervical and breast cancer. Although women report more chronic conditions than men in later life, the severity of their problems tends to be less than that of same age men, probably due to their earlier health care practices -- hence the phrase "women get sicker, but men die quicker."

50. False. Old age is a social construct. Meanings, definitions, and experiences of aging vary across cultures and throughout history. What people consider to be "old" has changed significantly just within the past 100 years in the U.S. as people live longer and healthier. Being identified as "old" is related not

only to chronological age, but also health, functional ability, social roles, and self perception. Age 65 is an arbitrary marker that has been associated with eligibility for governmental programs such as Social Security and Medicare (although the age of eligibility for Social Security is gradually being raised to 67 by 2027)