Physical Changes of Aging

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Overview

This publication covers some of the physical changes that are commonly associated with aging. The focus is on changes that occur normally and are not due to disease. These changes include sensory loss, digestion, circulation, and sexuality. Information is provided about simple steps that can be taken to help prevent illness and injury. These steps will also help maximize the older person's independence, if problems do occur.

Sensory Changes

Humans receive and process information from the environment through hearing, vision, taste, smell, and touch. With aging, these senses are often diminished and incoming information may be distorted or difficult to understand. As a result, the older person may give up some enjoyable activities or lose contact with friends and family who are important sources of support. These problems can be reduced or overcome by following the suggestions described in the sections below.

Hearing

About 30% of people over 60 have a hearing impairment, but about 33% of those 75 to 84, and about half of those over 85, have a hearing loss. Hearing loss affects the older person's ability to talk easily with others. For example, older people often have trouble hearing higher pitched tones. They also may not be able to make out sounds or words when there is background noise.

Conversations may be difficult to hear, especially if the speaker has a high voice or there is background interference.

Older persons may be frustrated or embarrassed about not being able to understand what is being said. They may have to ask people to repeat themselves, or endure shouting when a speaker tries to be heard. Older persons may hold back from conversation out of a fear of making inappropriate comments. They may tire from concentrating and straining to hear. As a result, the older person may withdraw from friends and family and outside activities.
Hearing loss doesn't have to cause social isolation and emotional distress. Simple changes in behavior and the home environment can increase the elder's ability to carry on a normal conversation.

- Speak clearly and in a normal tone of voice. Don't speak too fast or too slow. Hold your head still. Do not shout.
- Get the older person's attention before speaking.
- Look directly at her or his face and at the same level.
- Stand or sit with the light above or toward you, not behind you. Keep your hands away from your mouth.
- Eliminate background noise from radio and television.
- Try using different phrases with the same meaning if you are not getting your point across.
- Build breaks into your conversation.
- Use facial expressions or gestures to give useful clues.
- Repeat yourself if necessary, using different words.
- Ask how you can help.
- Include the hearing-impaired person when talking, do not exclude them.

There are many different devices that can be used in the home to help a hearing-impaired person. Special phones work with hearing aids and ring louder than a standard phone. There are alarm clocks, smoke detectors, and doorbells that have flashing lights and vibrations to alert the hearing-impaired.

Older adults need routine hearing exams by qualified professionals. Have hearing checked by an audiologist to be sure that another problem is not causing the hearing loss. If a hearing aid is needed, work with the audiologist to find the right brand and fit. If you are a caregiver, provide plenty of support and encouragement to the person who is adjusting to the hearing aid.

Vision

Even though changes to the eye take place as a person ages, many older people have good-to-adequate vision. Nevertheless, beginning in the late 30s and early 40s, an individual may begin to notice some changes. She or he may have to hold the paper farther away to read it due to changes in the ability of the lens to change its shape to accommodate to distance.

With aging, peripheral vision is reduced. A person may need to turn her or his head to see to the sides. The flexibility of the eye decreases and it takes an older person more time to accommodate to changes in light. Adaptations in lifestyle and behaviors must be made to cope with this change. An individual might give up driving at night. Placing more lights evenly around the room so that the entire room is lit is also helpful.

Degeneration of eye muscles and clouding of the lens are associated with aging. Several changes in vision result from this. Older people tend to have trouble focusing on near objects, but eyeglasses may correct this problem. In addition, the ability to see colors changes with age as the lens yellows. Red, yellow, and orange are easier to see than blue and green. This is why fabrics in warmer shades may be more appealing to the older person.

Serious vision impairments such as cataracts, glaucoma, and blindness affect between 7% and 15% of older adults. If someone you know must learn to cope with blindness or near blindness, you can play a critical role in helping them maintain their independence.

To help a person with any visual impairment, or to make your own life brighter:

- Light the room brightly and use more than one non-glare light in a room.
• Use blinds or shades to reduce glare.

• Keep a night light on in the bedroom, hallway, and bathroom to maintain an equal level of light.

• Increase lighting on stairwells and steps.

• Use concentrated light for sewing and reading.

• Turn lighting away from the television to avoid glare.

• Provide printed materials with high contrast between the background and lettering.

• Use contrasting colors in the home, such as colors between the doors and walls, and between the dishes and table coverings.

• Mark the edge of steps with a brightly colored tape or different colored paint, and paint the handrails.

• Provide audio-taped books and music for the elder's cognitive stimulation, entertainment, and relaxation.

• Wear a hat with a wide brim and sunglasses while outside. This will protect the eyes against too much sunlight, which can lead to cataracts.

• Know the warning signals of possible vision problems, including pain in or around the eyes, excessive tearing or discharge, double vision, dimness or distortion of vision, flashes of light, halos or floating spots, swelling of the eyelids or a protruding eye, changes in eye color, and changes in vision or movement of one eye.

• Make sure the older person has regular eye exams, including a glaucoma screening, at least once every 1-2 years.

Unfortunately, people who experience vision problems may avoid activities that require good vision and become isolated. Work with a professional to explore ways to help the older person maintain a normal lifestyle. With today's technologies and medical care, individuals don't have to accept limitations from declining vision as an inevitable part of aging.

Taste and Smell

Some loss in taste sensitivity takes place with aging. However, the loss is minor and does not seem to occur in most people until well after 70. There is also a loss of smell, but this is not severe.

Nevertheless, older people often complain that their meals are tasteless or that they no longer like their favorite foods. Most experts feel that these complaints are caused by a sense of loneliness at meals, or an unwillingness or inability to cook. Also, older persons may not buy more enjoyable foods when they have difficulty chewing due to poor dentures or dental problems, or are stretching their food dollars due to a limited budget.

To help the older person enjoy mealtime:

• Offer familiar, well-liked foods.

• Invite or encourage the elder to share meals with friends and family, in his or her home or at congregate meal sites.

• Experiment with different seasonings and flavorings.

• Prepare a variety of foods each day.

• Make the table colorful and inviting with bright napkins, mats, and flowers.

• Encourage exercise, when possible, which stimulates the appetite.

Touch

The skin serves a protective function by buffering us from the environment. Skin changes leave the older person vulnerable to discomfort and harm. Due to reduced sensitivity, heat sources such as heating pads, hot water bottles, and pot handles can hurt the skin before the elder realizes that damage is occurring.

An older person may develop a greater sensitivity to cool temperatures and drafts. This is caused by a decline in sweat gland activity, a decrease in the ability to maintain a normal body temperature due to poorer circulation, and a thinning of the skin. Wrinkling, drying, and scaling also occur. The skin tears and breaks more easily, increasing the chance of injury and infection.
To cope with these changes, the older person should:

- Avoid extreme exposure to sun and wind, which speed up the aging of the skin.
- Avoid daily baths or showers, as these tend to dry out the skin.
- Moisturize the skin with body oil after a bath, gently patted on with a washcloth.
- After bathing, pat the skin dry.
- Drink one to two quarts of fluid daily to maintain normal body temperature and functioning.

The sensation of touch connects us with others no matter what our age. Thus, touch is important in maintaining the elder's emotional well-being. Use touch to communicate that you are there for support and that you care.

### Changes in Bones and Muscles

Aging adults, especially the very old, are vulnerable to broken bones. In addition, joints stiffen and connecting ligaments between bones lose their elasticity. Hand and foot pain may result.

Although there is no known way to prevent sometimes painful changes in aging muscles, bones, and ligaments, regular exercise helps to assure continuing mobility in old age. Most physicians feel that walking, along with adequate rest and a nutritious diet, are tremendously valuable for maintaining mobility and fitness in the later years.

Health professionals advise middle-aged and older adults to:

- Eat a well-balanced diet with the proper amount of calcium and other essential nutrients.
- With a physician's guidance, start or continue a regular exercise program.

It is very important to prevent falls. Due to changes in bone mass and strength, falls often result in injury, hospitalization, and continued declines in health.

The suggestions covered under vision and hearing, as well as those listed below, will help the older person take the necessary precautions to prevent falls.

- A no-slip bath mat and grasp rails are installed in the shower or tub.
- A seat is placed in the shower if standing is difficult.
- If scatter rugs are used, they should have no-slip backing or mats underneath.
- Chairs are sturdy and do not wobble, break, or tip over.
- A safe, sturdy step stool is available to reach high places.
- The telephone is placed in a convenient location.
- Chairs and sofas are at a height that permits easy sitting.
- Floors and stairs have non-skid surfaces.
- Railings line all staircases.
- Staircases and walkways are uncluttered.
- Front and back steps, and inside flooring and carpeting are in good condition.
- Instructions for the proper use of medications are followed carefully, as improper types or dosages often cause falls.

Archival copy: for current recommendations see http://edis.ifas.ufl.edu or your local extension office.
Digestion

Teeth and Mouth

Older adults are more likely to lose teeth to gum disease than to problems with the teeth themselves. However, with proper personal care, regular checkups, and improved dentistry methods, older people are more able to retain their natural teeth throughout their lives. Older people who do lose their teeth may now expect and demand comfortable, well-fitting, and durable dentures.

Digestion

The digestive system is very sensitive to emotions. An older person may experience an upset stomach or lack of appetite when lonely, depressed, or worried. Regular contact with friends and relatives, through visits and telephone calls, can help prevent these problems.

It is fairly common for older people to have less frequent bowel movements and to suffer from constipation. This is due to changes in tissue and muscles and reduced thirst. Regular exercise, such as a daily walk, can prevent constipation. A well-balanced diet that includes adequate fiber and fluid intake also encourages normal bowel function and minimizes the need for laxatives. In contrast, self-prescribed laxatives are an expensive substitute for foods that naturally keep the gastrointestinal system running smoothly, such as bran cereals, fruits, and vegetables. Overuse of laxatives can interfere with the availability of nutrients for healthy body functioning.

Adequate fluid intake is essential for maintaining proper body temperature and functioning of the digestive system. However, some older people make the mistake of limiting their fluid intake in order to avoid frequent urination. Dehydration is a serious problem for the elderly. This is due to their decreased sense of thirst and reduced capacity to conserve water. In addition, laxative abuse, diuretic therapies, infections, immobility, or excessive use of alcohol or caffeine tend to promote dehydration.

Caregivers and older adults should follow the guidelines below to assure proper gastrointestinal functioning.

- Get some form of regular exercise that is appropriate to the level of physical ability.
- Maintain a well-balanced diet that includes natural sources of fiber such as whole grains, fruits, and vegetables.
- On a daily basis, drink eight cups of water and other fluids.
- Watch for signs of dehydration, such as mental confusion, decreased urine output, constipation, nausea, lack of appetite, dryness of lips, and elevated body temperature.
- Pay special attention to fluid intake during hot weather.
- Monitor the fluid balance in older people with special medical problems, such as congestive heart failure or kidney disease. Discuss the appropriate methods to monitor fluid intake and output with your doctor.

Circulation

The older heart slows down and is less able to pump blood through the body than the younger heart. This results in older people having less energy and stamina for physical work. Decreased circulation also contributes to cold sensitivity, particularly in the hands and feet. Because oxygen necessary for proper physical and cognitive functioning is carried through the blood, the elder with poor circulation may experience forgetfulness and other symptoms of poor cognition.

Blood vessels, which play an important role in the circulation of blood throughout the body, lose elasticity as we age. This causes blood to tend to "pool" in the feet and legs. This means that swelling (edema) may occur in the extremities. Consequently, the heart, which undergoes muscle changes as we age, must pump harder in order to carry the blood to all parts of the body.

Changes in circulation make the older person more susceptible to the development of "little strokes" (TIAs) than when younger. Symptoms of such episodes include headache, vision disturbances, loss of balance, confusion, and dizziness when standing quickly from a sitting or reclining position. Because "little strokes" can be harbingers of a larger stroke, consult with the older person's primary health care provider, should these occur.
Many older people are on medications that impact circulation. Be familiar with these medications, and their side effects. This may prevent complications, which may arise from their use.

Pressure ulcers, a skin problem found in people with limited mobility, are due to impaired circulation. When an older person is unable to move about, tissue may die due to lack of an adequate blood supply to the skin. Areas particularly susceptible to these ulcers are those over bony prominences such as hips, shoulders, elbows, knees, ankles, and the heels of the feet.

To facilitate proper circulation and its effects:

- Prop the feet on a footstool or other appropriate stable object when sitting.
- Change the person’s position at least every two hours to prevent pressure ulcers of the skin.
- Develop an activity routine which conserves energy and yet includes opportunities for movement.
- When the elder is sitting, rotate her or his feet at the ankles frequently to promote circulation.
- When the elder is rising from a reclining position, help her or him sit on the edge of the bed for a few moments before standing.
- Be familiar with the older person’s medications and their side effects to prevent falls and other complications.
- Be alert to sensitivity to cold in the older person. Make certain there are sweaters, blankets, and other warm materials available.

**Sexuality**

Sexual desires and the physical capacity to engage in sex continue throughout life. Loss of interest in sex is usually due to emotional causes, drug use, or disease, and not necessarily to aging. Changes in sexual response and in the sex organs lead to changes in frequency and pattern of performance. However, the older person’s own health and a healthy and willing partner are important factors in sexual expression. Sharing feelings and closeness with another person are very important to sustaining emotional and physical intimacy.

**Conclusions**

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. A program of regular, thorough health check-ups and self-examinations will identify changes that may be cause for concern.

Many of the once-disabling problems of aging can be managed through improved health care and the use of assistive devices. Simple but effective changes in the home environment can be made that prevent problems and enable the older person to maintain independence.

The person who has had good health habits when younger and who maintains these habits throughout life can expect to age with a sense of well-being and continued enthusiasm for living. A healthy lifestyle includes getting plenty of appropriate physical activity, such as simple stretches and walking. Research confirms that physical activity prevents problems as people age such as increased weight gain and risk of cardiovascular disease. Activities that increase strength and mobility can also help older adults remain independent.

To stay healthy, older adults also need adequate sleep, sufficient fluid intake, nutritious foods, and a healthy and comfortable body weight. For more information about aging, meeting nutritional needs in the later years and maintaining a healthy lifestyle, contact your Cooperative Extension Service county agent.
References


