

How Normal Aging Affects the Body and Aging Delay Tactics



The following is a condensed explanation of the body's aging process.

The Cells: Cellular activity starts to slow down over time. This affects all the systems of our body. Cellular changes cause physical changes to occur in people. Speed of decline is determined by many factors including lifestyle choices such as smoking, alcohol abuse, poor nutrition; exposure to sun, hormones, fitness, and genetics.

HEALTH TIP: *You can't change genetics, but you can make healthy lifestyle choices to delay aging or reduce the opportunity for ill health. Avoid tobacco products and alcohol abuse. Choose to eat healthy and nutritious foods and stay fit.*

The Skin: Obvious signs of aging involve the skin, hair and nails. The skin gets less elastic, wrinkles or dark spots may appear; hair loss occurs, turns gray. Nails become thicker due to less circulation.

Health Tip: *Drink lots of water to maintain healthy skin. Use moisturizers and sunscreen. Visit the foot doctor (podiatrist) regularly to assure good foot care. After all, you use your feet all day to get around in this world.*

The Heart System (Cardio-Vascular System): Blood flow to the body slows down typically by the eighth decade. Heart muscle may weaken, blood pumping action declines, and the result is less energy due to less oxygen in the blood and less overall nourishment to all the cells of the body. Healing rates slow down; response to stress changes, and there is a greater risk of having side effects with medications. Blood pressure changes can occur, increasing the risk of stroke, heart attack, and congestive heart failure (CHF).

Health Tip: *Keep your heart active by doing aerobic exercises. Aerobic exercises keep the heart working, which keeps the blood pumping, which brings oxygen to the lungs, which makes breathing easier, which makes a person feel more energetic. It reduces the risk of stroke, heart disease and CHF. As Martha Stewart says, "It's a good thing." See your doctor before starting any aerobic activities.*

The Breathing System (Respiratory System): As with the cardio-vascular system, breathing becomes a little less efficient as the body ages. The cells have more difficulty getting oxygen and exchanging oxygen. Muscles used in breathing weaken, making it more difficult to breathe deeply, cough, and expel carbon dioxide. Smoking or polluted environments makes this even worse. The physical results can lead to loss of energy, fatigue, possibly anxiety, and a reduced ability to do cherished daily life activities.

Health Tip: *Stay physically active throughout the age span. Work to maintain strength in muscles and lungs to promote deep breathing and getting oxygen to the blood. The result will be an increase in energy and vigor, feeling better about life, and a greater ability to do preferred activities. Avoid smoking, being near smokers and polluted environments. Take slow deep breathes regularly. Wake up and smell the roses!!!!*

Muscle Changes: Muscle bulk gets thinner, and fatty deposits take the place of actual muscle tissue. This results in some loss of muscle tone and strength. The physical results of this can affect the ability to breathe deeply; can cause constipation and/or bladder incontinence, and it can cause an overall decline in physical strength. Loss of muscle strength can also have a serious effect on balance, which affects walking, getting around safely, and driving an automobile.

Health Tip: *Regular physical exercise throughout the lifespan helps reduce the negative effects of age related changes. So, the best tip is to stay physically active. Work on maintaining muscle strength and joint and muscle flexibility. Tai Chi is an excellent resource. To prevent constipation, drink lots of water. Water really does help. Remember to try to drink at least 5-6 eight ounce glasses of water a day.*

The Skeletal System: For bones to be strong, calcium is a must. However, by the mid thirties, calcium is lost and bones become less dense. When this occurs, the likelihood of bones breaking starts to increase, while the ability to weight bear lessens. Serious bone density losses can lead to spontaneous bone fractures (fractures that occur all by themselves) and a condition called osteoporosis. When vertebrae lose calcium, they get thinner, and actual physical height is lost.

Because the bones are the muscles framework, posture can change, too. If bones are not as strong, the muscles may not be able to work as efficiently. Deformities can occur. When deformities occur, loss of range of motion occurs. This can make all physical demands (such as bending, reaching, holding, lifting, moving, etc) much harder to accomplish. This means there is more physical stress for the body to get an action done. This starts a vicious circle that can lead to fatigue, pain, and disability.

The joints also undergo changes. Arthritis is the most common chronic condition in the elderly. The two most common forms are osteoarthritis, a wearing away of the joint cartilage, and rheumatoid arthritis, a disease of the connective tissue. These conditions can have a huge impact on hand and leg function which affects the ability to do basic daily life activities such as bathing, dressing, grooming, feeding oneself, walking, and other activities such as driving a car, managing one's home, traveling, etc.

Health tip: *To keep healthy bones, it is important to stay active. Weight bearing activities that make the muscles and joints move around can help to maintain healthy bones. Take a look at calcium supplements. All boomers and people 65 or older should see a doctor for medical advice before starting an exercise program.*

The Nervous System: Everyone loses nerve cells, but did you know this begins in early adulthood, as soon as in the mid twenties? Gradually over time, the loss of nerve cells affects the efficiency of the nervous system. Response time declines, coordination changes. Sleeping patterns may be affected. Driving skills may be negatively affected.

Health tip: *Eat lots of greens and orange foods such as spinach, asparagus, and carrots. Pay attention to declining driving skills, because unsafe driving is a skill that can kill.*

Stomach and Intestinal System (Gastrointestinal System):The breakdown and absorption of foods depends on a lot of things such as drinking plenty of water, eating nutritious foods, and fitness. With age, the production of stomach acids, digestive enzymes, and spit (saliva), along with a loss in the number of taste buds can have an effect on the gastrointestinal system. These changes can result in physical pain and distress, changes in the ability to swallow, and a delay in emptying contents of the stomach. These issues can also have an affect on vitamin absorption. The physical affects include weakening of the capillaries, easy bruising, muscle cramping, reduced appetite, weakness, mental confusion and/or illness.

Health Tip: *Eat healthy nutritious foods that assist the stomach in digestion and the intestines in elimination such as lots of leafy green vegetables and fruits. Drink lots of water, too. Watch the seasonings, and try to avoid or reduce the amount of salt consumed.*

The Metabolic System: The metabolic system is responsible for changing food into energy. In early adulthood, metabolic rates decline about 1% every year. This slowing affects food absorption as well as metabolism of drugs. This can cause reduced energy and increases the chances of drug poisoning or toxicity with older adults.

Health Tip: *More of the same, stay active, eat small amounts of food throughout the day to maintain an energetic metabolic system, and drink lots of water.*

Sensory Changes with Aging:

Vision: Usually by the fourth decade, vision changes are noticeable. Older adults require three times more light than younger persons. Small print becomes harder to read. Contrast sensitivity which is the ability to distinguish the foreground from a background such as a curb from the road, declines. There is an increased sensitivity to glare, a loss of depth perception; and more difficulty differentiating pastel colors, especially blues and greens. The physical affects can have a serious negative affect on safe driving and safety at home.

Safety Tips: *Add more lighting at home, especially near stairs, the bedroom for those night time bathroom visits; and in and around the home. Be careful when driving a car, as it only takes one accident to end a life or cause serious injuries. Check your eyesight every year with a qualified eye doctor (optometrist or ophthalmologist.). For more information, visit <http://www.aoa.org/> and <http://www.aao.org/>.*

Hearing: Not everyone experiences a hearing loss with age, however, common hearing losses include a decrease in the ability to hear high pitch tones, difficulty distinguishing or understanding words. The physical results can have a negative affect on safety at home and on the road, as well as with interpersonal communication.

Safety Tips: With a hearing loss, you don't always know if you have missed something very important. This seriously increases safety risks. Some hearing losses can be assisted by hearing aids. See a qualified and experienced audiologist to be tested for the best devices. There are adaptive devices that can help recognize warning sounds through vibration or flashing lights. If this is of interest, call an occupational therapist for help. Internet site: <http://www.asha.org/default.htm> or <http://www.aota.org/>

Taste and Smell: Because some taste buds are lost with aging, taste can be affected. Other health conditions can cause a loss of smell, which can have a negative affect on appetite; a greater desire for highly seasoned foods; a reduced awareness of body odors or spoiled foods. It can also be a serious safety hazard due to the inability to smell smoke or hazardous or toxic fumes.

Safety tips: *Install a smoke detector near all bedrooms in the home, and near the kitchen. Check batteries regularly, but change them twice a year for safety such as on Memorial Day and New Years Day. Keep a certified fire extinguisher in the home and watch the expiration dates. Good nutrition is essential for health and wellness. Watch the use of salt. If you need help finding ways to make foods taste better, contact a registered dietician. To find a registered dietician, check out this Internet site. <http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/index.html>*

Cognitive Changes Associated with Aging

Intellectual decline is not a normal aspect of aging. It can happen with sensory deprivation such as caused by social isolation, failure to be involved in other life activities, and certain medical conditions and medications. Intellect can even improve by staying involved in life, doing activities such as puzzles, games or learning new things. Learning, memory, and intellectual functioning are very responsive to a person's physical and psychological state. Short term memory challenges do frequently occur with aging.

Health tips: *Keep the mind active, stay involved in life activities and avoid isolation. Try to continually meet new people or do new things. If memory, judgment and decision making seem to be declining, contact a doctor for an evaluation.*

Resource: This excellent resource was used as the basis for this article. For the entire article, refer to the following: <http://ist-socrates.berkeley.edu/~aging/ModuleProcess.html#anchor157481>