

## AGING SIMULATION

(Condensed from: "Understanding the Aging Process through Simulation," by Schmall and Staton. Illinois Teacher of Home Economics. Volume XXV, No. 4. March/April 1982, University of Illinois, Urbana-Champaign.)

### SUPPLIES PER STUDENT:

1 low salt wheat thin spices—a variety	12 pieces masking tape
apples, carrots, potatoes—cut into small pieces	surgical glove
2 x 5 inch piece yellow cellophane	2-3 oz. drink mix
2 cotton balls	paper cup
	nose plugs

After students are seated, have them take everything off their desks except for a pencil/pen and a piece of paper. Students should take notes on the changes that occur during the aging process as they experience the simulations. Following each simulation and/or at the conclusion of the activity, discussion can focus on student reactions, feelings, and the implications of such changes. (Each simulation could be set up at a separate station for students to move through in small groups. The content at each station could be read by a member of each group before students follow the directions of the simulations.)

1. Taste Simulation: Pass out 2 unsalted crackers plus unsweetened drink mix, colored water or weak lemonade to each student. Have the students eat the cracker **without** chewing to illustrate the decrease in dental health.

Content: By the age of sixty-five, fifty percent of the taste buds are lost by the average person. Ability to taste foods however, is usually not affected until the late seventies when a person has approximately one-sixth of the buds he/she possessed at the age of twenty. Sweet and salty flavors are the first to go. Sour and bitter tend to function to a very old age and are the last to go.

2. Smell Simulation: Use nose plugs, hold the nostrils closed or use masking tape. Blindfold students and present them with a variety of odors—for example, spices to identify. Foods similar in texture—for example, apples, carrots, and potatoes—may be cut in small pieces and fed to students while they close their eyes and hold their nostrils closed. Have them try to identify the various foods.

Content: Over forty percent of people the age of eighty and older have difficulty identifying common foods. Because two-thirds of the taste sensations depend on the ability to smell, decline in this sensory system may further reduce a person's appetite or interest in food. It may also mean that a person is not able to smell body or household odors that may be offensive to others. Warning odors such as gas, spoiled foods, and smoke may go unnoticed.

3. Sight Simulation: Pass out 2 x 5 inch pieces of yellow wrinkled cellophane to each student (cheese cloth or cling gauze are alternatives). Have the students tape the wrinkled cellophane to their foreheads as if they were wearing glasses. Have them

leave the cellophane on for the entire period.

Content: With increasing age the eyes decrease in their ability to see as clearly as when the person was younger, particularly details such as small print or the eye of a needle. The average sixty-five-year-old has a visual acuity of 20/70 or less. Although the majority of older adults have good to adequate vision, thirty-three percent of people sixty-five and older report that an inability to see well prevents them from doing things they want to do. The lens of the eye yellows with age and filters out colors at the blue end of the light spectrum. The warm colors red, yellow and orange are more easily distinguished by many older people than the cool colors blue, green and violet. Older people also require more time to adjust to changes in light level and are more sensitive to glare. Considerably more light is required to see.

4. Mobility/Dexterity Simulation: Wrap masking tape around each finger on one hand, particularly the thumb and index finger, or tape splints on several fingers. Knee and elbow joints may be immobilized by using splints or wrapping them with 3" to 4" elastic bandages.

Content: Forty percent of people over the age of sixty-five experience limits in activity due to changes in the skeletal-muscular system. Bone, muscular changes and health conditions (such as arthritis, Parkinson's Disease and stroke) can mean decreased dexterity.

5. Touch Simulation: Wear a surgical or latex glove and wrap tape around the tips of the fingers, or apply rubber cement to the fingertips and let it dry.

Content: Skin sensitivity and the ability to detect pain decrease with age. It is more difficult for the older person to distinguish textures and objects by touch alone. An older person is more apt to be cut or burned and not know it until sever damage has occurred because the pain threshold increases. Reaction time is slower.

6. Hearing Simulation: Pass out 2 cotton balls to each student and have the students place them in their ears, again leaving them in until the end of the hour (industrial ear plugs are more effective; swimmer ear plugs or masking tape placed over the ears are alternatives).

Content: Hearing loss is potentially the most serious of the sensory changes. Unlike poor vision, it rarely inspires sympathy and understanding; it is more likely to cause loneliness and depression. Approximately thirty to fifty percent of older adults have a hearing loss that affects their communication with others. More older men than women are affected, probably due to working in noisier environments. Older people have a reduced ability to hear sounds of low intensity and high frequency. S, F, P, and TH become difficult to hear. As a result, the person may hear fill instead of pill.