

Providing Personal Care For The Elderly

Why is personal care important?

Before getting into the how of personal care for the elderly, we first need to look at why it is important. And, before we can look at why it is important we should first look at the physical changes the human body goes through as it ages.

Age-related physical changes

The age-related physical changes to the skin, musculoskeletal, cardiovascular, and endocrine systems, gastrointestinal tract, bladder and teeth result in an ever increasing fragility with the elderly.

Reducing entire text books on age-related physical changes to a few paragraphs, even for only those systems included in this article is difficult, but here it is. Ready? Here we go!

In the elderly, skin cell replacement drops about 50%, healing decreases significantly, blood supply to the skin decreases with the greatest decrease to the arms and legs. Subcutaneous fat loss contributes to decreased cold tolerance. And as the skin becomes thinner and less elastic the epidermis becomes thin and fragile resulting in reduced wound healing and increased risk of decubitus ulcer formation.

Sweat glands decline in size, number and function causing decreased perspiration, increased dry skin and decreased ability to regulate body temperature. Hair growth decreases, hair may become lifeless and brittle due to the decrease in scalp secretions. And nail strength decreases, growth becomes erratic with longitudinal ridges, flaking, brittleness and malformations increasing.

Skeletal muscles, connective tissue, and smooth muscle all become more rigid and strength declines. These changes in the chest wall cause a reduction in respiratory ability and capacity. The intercostal muscles and the diaphragm use increases to aid expiration, and the cough mechanism is less effective due to decreased strength of the thoracic musculature.

As the posterior thoracic curvature increase kyphosis combines with the loss of elasticity, thickening of the lung tissues (the lungs become rigid) and decreased alveoli (number and size), functional capacity of the lungs drops about 50% with an increase in shallow respirations and a decrease in deep breathing. And a decrease in respiratory fluids (as much as 30% in reduction) heightens the risk of pulmonary infection and mucus plugs.

In the mouth tooth enamel thins, teeth become brittle, and saliva production decreases causing dry mouth and a diminished sense of taste which is exacerbated by the decreasing number of taste buds.

The risk of aspiration increases as the biting force and gag reflex declines, combined with decreased peristaltic activity and relaxation of the lower esophageal sphincter.

And so it goes, with each system.

In the small intestine the nutrient absorption may decline. In the large intestine the musculature weakens, peristalsis decreases, nerve stimulation diminishes and constipation follows especially when linked with an inadequate diet and reduced exercise. And the anal sphincter loses strength and elasticity which may lead to bowel incontinence.

A decreased ability to metabolize and detoxify many drug products is the result of decreases in the size of the liver and decreased hepatic enzyme concentrations.

The kidney also decreases in size from reduced renal tissue growth. The decrease in glomeruli and tubules (size and number) decreases the glomerular filtration rate (losing as much as 50% of its function) which reduces the renal clearance of drugs.

The bladder capacity decreases by half causing increase in urinary frequency and nocturia. (Some older adults may need to void 30 minutes after going to bed because a recumbent position increases renal function.) The bladder shape changes and emptying becomes more difficult due to weakening of the musculature thus retention and UTIs follow.

In men increased frequency or dribbling may result from a weakened bladder or an enlarged prostate gland and in women, stress incontinence may result from weakened musculature of the pelvic diaphragm both from age-related loss of strength and elasticity and from child birth.

Changes in the joints begins as early as 20 years of age as cartilage erosion begins. And as time marches on so do the joint changes causing continuing erosion, a thickening of the synovial fluids, arthritis, inflammation, degeneration, loss of ambulation ability, flexibility and range of motion.

Vision changes can result from presbyopia, cataract formation, and changes to the vitreous humor. Changes to the depth of the anterior chamber and reduction in aqueous humor reabsorption may cause glaucoma. The eye's ability to adapt to the dark decreases with age as the pupil becomes smaller and less elastic. Older adults need about three times as much light as a younger person to see objects clearly. And, as the lacrimal apparatus gradually loses fatty tissue, the quantity of tears decreases and evaporation occurs more quickly.