

Elderly nutrition assignment



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Introduction Throughout the last decade and into the current century the older population will continue expand in size and diversity. Individual older people differ greatly from one another in their nutrient requirements and need for nutrition services. The aging individual in good health who exercises regularly and takes few medications may have nutrient requirements that are similar to those of younger adults of the same sex, build, and health status.

Conversely, the chronically ill elderly adult who is regularly taking a wide variety of drugs is likely to have increased need for particular nutrients as compared to his or her peers who enjoy good health. An active older persons living in the community who is able to obtain and prepare adequate meals will also need reliable sources of nutrition information to support self care, programs and services to meet his or her nutritional needs. The institutionalized elderly person is likely to need nutrient-dense, easily swallowed foods that provide substantial levels of nutrients.

Each of these individuals presents a unique challenge to the professional responsible for nutritional care. Definition of Elderly: A number of terms are used to describe people considered old, There are several and varying identities. Champion, 2004, identifies three categories of old. The ‘ near old’ covering ages 55-64 years, the ‘ young old’, ages 65-79 years and the ‘ oldest old’ ages 75 years and over, sometimes the 80 years and over which is also designated the ‘ frail elderly. The Aging Process: Aging is a normal process that begins at conception and ends at death.

During periods of growth, anabolic processes exceed catabolic changes. Once the body reaches physiologic maturity, the rate of catabolic or degenerative change becomes greater than the rate of anabolic cell regeneration. The resultant loss of cells leads varying degrees of decreased efficiency and impaired organ function. The Aging Process Generally involves slowing down of systems Varies greatly among individuals Influenced by genetics, environment, and lifestyle factors (Mahan and Escot-stump, 2006).

Age-related changes that affect eating and nutrition include: Elderly people is faced with physiologic and social changes that are unique to aging these changes lead to a wide array of conditions that impair appetite, the ability to eat, and utilization of nutrients, resulting in an increase risk for malnutrition and nutrition-related health problems and decreased quality of life (Mary, 2003). Physical Changes of Aging: Reduced Perception of Thirst in Healthy Elderly: Older people are more susceptible to develop problems with fluid and electrolyte balance due to physiological renal impairment and changes in thirst perception.

Fluid Deprivation and repletion studies comparing younger adults with the older population have demonstrated that despite physiological needs, older people do not consume adequate amounts of fluids to maintain ideal plasma electrolyte concentrations. This impaired fluid and electrolyte balance is due to several factors, including reduced glomerular filtration rate, reduced ability to concentrate urine, less efficient sodium-conserving capacity, reduced ability to excrete water load and altered thirst sensation. Fluid intake in older people can be further affected by physical disability and cognitive impairment.

Adverse effects of drugs such as diuretics, either by altering thirst or prompting diuresis, cause dehydration. 1. Changes in body composition: ??? Sarcopenia: Sarcopenia diminished muscle Sarcopenia, refers to involuntary loss of skeletal muscle mass and consequently of strength (Holloszy, 2005). ??? Musculoskeletal Changes: ??? Progressive drop in bone mass : 30's and 40's ??? Women: accelerated during menopause ??? Skeleton more vulnerable to fractures or osteoporosis ??? Adequate intake of calcium and Vitamin D helps to retain bone. 2. Sensory Change:

Decreases in all senses, of taste, smell, sight, hearing, and touch diminish at individualized rates. particularly in the taste buds, and smell may affect appetite, food choices and intake and subsequently impair nutritional status and immunity, alter food choices and produce weight loss. ??? dysgeusia, loss of taste ??? hyposmia (i. e. , decreased sense of smell) Since taste and smell stimulate metabolic changes such as salivary gastric acid, and pancreatic secretions and increases in plasma levels of insulin; decreased sensory stimulation may impair these metabolic processes (Schiffman, 2000). 3.

Oral changes: Diet and nutrition can be compromised by poor oral health. Tooth loss, use of dentures, and xerostomia (i. e. , dry mouth, lack of salivation) can lead to difficulties chewing and swallowing. Denture wearers chew less efficiently, People with these mouth problems often prefer soft, easily chewed foods and avoid some nutritionally dense options such as whole grains, fresh fruits and vegetables, and meats (Wyatt, 2002 and Akimoto et al. , 2003). 4. Gastrointestinal tract changes: Decreases in taste

sensation and saliva production make eating less pleasurable and more difficult.

Dysphagia due to weakened tongue or cheek muscles can make chewing and swallowing both difficult and dangerous. Dysphagia increases the risk for aspiration pneumonia, an infection caused by food or fluids entering the lungs. Thickened liquids and texture modified foods can help people with dysphagia eat safely. Gastric changes can also affect a person's ability to eat. Decreased gastric mucosa leads to an inability to resist damage such as cancer, ulcers, and infections. Gastritis causes inflammation and pain; delayed gastric emptying, discomfort.

These all affect the bioavailability of nutrients and increase the risk of developing a chronic deficiency disease Such as osteoporosis. Achlorhydria is the insufficient production of stomach acid. The decline in acid can be due to age as well as atrophic gastritis. About 30% of those over age 50 have achlorhydria. Sufficient stomach acid and intrinsic factor are required for the absorption of vitamin B12. Although substantial amounts are stored in the liver, B12 deficiency does occur (Russell 2002). Constipation: Constipation is not a disease; it is a symptom.

Constipation is defined as having fewer bowel movements than usual, having difficulty or excessive straining at stool, painful bowel movements, hard stool, or incomplete emptying of the bowel. Older adults are more likely than younger adults to become constipated. Primary causes include insufficient fluids, lack of physical activity, and low intake of dietary fiber. Constipation is also caused by delayed transit time in the gut and medications Constipation

can usually be alleviated by increasing fluids, activity, and fiber (Cashman, 2009). 5. Metabolic changes:

Basal metabolic rate decreased by 20% between the age of 30 and 90, mainly because of the decrease in lean body mass (Mahan and Escot-stump, 2006). 6. Cardiovascular Changes: During the aging processes blood vessels become less elastic and total peripheral resistance increases, leading to increase prevalence of hypertension. Serum cholesterol levels peak for men at age 60 but continue to rise in women until age 70 (Stone, 2009). 7. Renal function changes: Renal function deteriorates in the 40's consequently; the kidneys may have a poorer ability to concentrate the urine, as well as eliminating waste products more slowly.

Therefore, fluid balance will be under less precise control. In addition, thirst mechanisms are less sensitive. Thus, an elderly person runs the risk of dehydration; Consequences of dehydration include confusion, dry lips, sunken eyes, increased body temperature, dizziness and low blood pressure (Rudman, 2008). 8. Immune System Immunocompetence decline with age. These changes result in diminish ability to fight infections and malignancies, leading to prevalence of a variety of infections in the elderly.

Vitamin E, Zinc and other supplements may increase immune function (Mahan and Escot-stump, 2006). 9. Psychosocial Changes: ??? Depression: Depression is the most common cause of unexplained weight loss in older adults, it's occurs in approximately 15% of adults over age 65 and its higher incidence in those living in extended-care facilities. ??? Memory Impairment : Memory impairment caused by various types of dementia, Alzheimer's

disease or other neurological diseases rises dramatically, with half of all persons over age 85 affected.

Weight loss and improper nutrition are potential problems ??? Social Isolation: Some of elderly fail to maintain an adequate diet because of social isolation, declining income, Loss of spouse or friends, and leads to many of health problems (Mahan and Escot-stump, 2006). References Akimoto, T. , Kumai, Y. , Akama, T. , and Hayashi, E. , (2003): Effects of 12 months of exercise training on salivary secretory IgA levels in elderly subjects. Br J Sports Med Feb; 37(1): 76-9 (abs). Champion, E. W. (2004): the oldest old (editorial), N Engl J Med 330: 1819.

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