Nutrition in the elderly

Abstract: An intresting article with clear cut guidlines on the nutrition aiming at the elderly for whom unfortunately less is written about.

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Importance Of Good Nutrition In The Elderly

All the systems of the body work together so any physiological change will require nutritional changes. Physiological changes that take place, as aging occurs, affect the need for several essential nutrients. Metabolism, chronic disease, social conditions and medicine intake, all affect the nutritional needs of the elderly. Changes in basal metabolism and physical activity may cause a decrease in energy needs. Loss of taste and smell allow the elderly to neglect their diets.

Nutritional Requirements Of The Elderly

Protein: 1.0 g Pro /kg body weight for healthy elderly, about 12-14% of total calories.

Fat: A small amount of fat is necessary for life. Fats transport fat-soluble vitamins (A, D, K, E), add flavour to food, and enhance its satiety value. Fat digestion is inhibited with aging. Fats should constitute no more than 30% of total calories. Only 10% of calories should come from saturated fat. Dietary cholesterol should be limited to 300 mg or less per day.

Carbohydrates: Minimum recommended daily intake is 50-100 g/day. At least 50% of total calories should come from complex carbohydrate sources. Daily recommended fibre intake is 20-35 grams.

Calories: The calorie content of protein, carbohydrate, and fat are as follows:

- Each gram of protein = 4 calories
- Each gram of carbohydrate = 4 calories
- Each gram of fat = 9 calories
- Calorie requirements depend on activity level. The body needs about 1.5 times the basal energy expenditure (BEE). There is a 10% reduction of caloric need between ages 51-75 with an additional 10-15% reduction after age 75 depending on individual activity.

Vitamin A: Need decreases; avoid supplements containing vitamin A.

Vitamin D: Need increases; patient should get exposure to sunlight when possible and include vitamin D-rich foods, such as fish and vitamin D-fortified skim milk, in the diet.

Vitamin B12: Need increases; patient should eat vitamin B12-rich foods, such as lean red meat, chicken and skim milk.

Folate: Needs decreases; no recommended changes.

Chromium : Need increases; increase intake of foods high in chromium, such as brewer's yeast and whole grain.

Zinc: Need increases; eat foods rich in zinc, such as lean red meat, oysters, wheat germ and whole grains.

Water: 6 to 8 cups daily.

Malnutrition

Predisposing Factors:

problems in obtaining food

- Economic (low pension income, stinginess)
- Problems with mobility
- Fixed habits, alcoholism

Difficulty With Chewing And Swallowing

- Stroke, parkinsonism, missing teeth

Increased Need For Nourishment

- Infections
- Trauma, surgery, particularly hip fracture patients

Disorders Causing Cachexia

- Cancer, chronic infections (eg tuberculosis)
- Alzheimer' disease

Impaired Utilisation Of Nutrients

Malabsorption (Intestinal Disorders)

Other Causes
- Psychological causes (depression, paranoia)
- Medications
- Decreased taste or smell
- Decreased sense of thirst

Immobility

Physiological Changes Related To Ageing
- Slowing of basal metabolism and reduction in physical activity lowers the need for calorie intake; in elderly women calorie intake is often below 1500 kcal. This is considered the risk level for insufficient intake of several trace elements.
- With ageing, muscle tissue diminishes and the proportion of adipose tissue increases.
- Decreasing glucose tolerance
- Susceptibility to disorders of fluid balance.

Consequences Of Malnutrition
- Increased morbidity and mortality are associated with malnutrition.
- Prolonged hospitalization.
- Impaired immune function, slower wound healing, increased risk of infections
- Muscle function and strength diminishes, risk for falls and fractures increases.

Diagnosis Of Malnutrition
- Clinical findings are not sensitive indicators of malnutrition.
- The most commonly used indicators are low body weight or BMI, thickness of the triceps and upper arm, serum albumin, haemoglobin and lymphocytes, interview on the contents of the diet, intake of vitamins, clinical examination, weight loss.

Treatment Of Malnutrition
- Protein supplements.
- An elderly person should receive 1-1.2 g of protein per kg of body weight daily; a sick person needs even more,
- With age the proportion of protein in the diet should increase.

Other Common Nutritional Disturbances
- Deficiencies of particular nutrients.
- Anaemias (iron, vitamin B12); look for an underlying gastrointestinal disease
- Osteoporosis and osteomalacia; Vitamin D deficiency is a common condition in institutionalized elderly patients and those who stay mainly indoors.
- Routine vitamin D supplementation is well justified. At a dose of 800 IU daily, vitamin D has been shown effective in the prevention of fractures.
- The recommended dose is 800 IU daily for all elderly patients.
- Night-blindness.

Woman Arrest Law

An incident took place in Pune - a young girl was attacked by a man posing as a plain clothes officer; he asked her to come to the police station when she and her male friend didn't have a driver's license to show. He sent the boy off to get his license and asked the girl to accompany him to the police station. He took her instead to an isolated area where the horrendous crime was committed.

The law, which most of us are not aware of, clearly states that between 6 pm and 6 am, a woman has the right to REFUSE to go to the Police Station, even if an arrest warrant has been issued against her. It is a procedural issue that a woman can be arrested between 6 am and 6 pm, ONLY if she is arrested by a woman officer and taken to an ALL WOMEN police station. And if she is arrested by a male officer, it has to be proved that a woman officer was on duty at the time of arrest.