

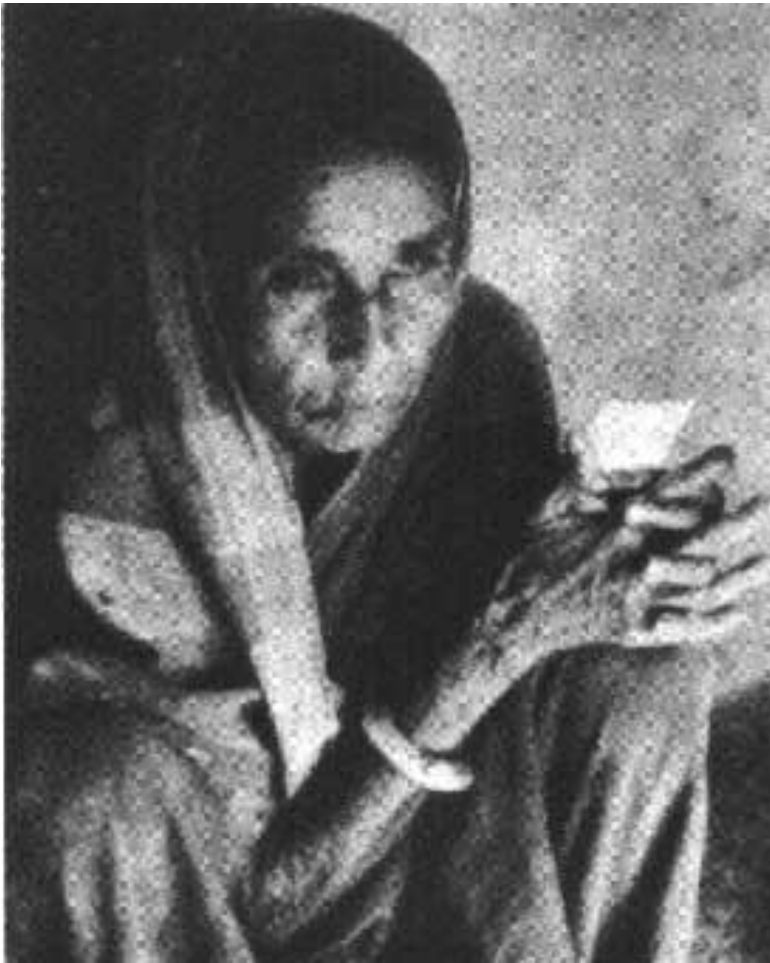
Nutritional requirement for old-age people



In context to Nepal

- ▶ In line with the definition of the World Health Organization (WHO), Nepal Senior Citizens Acts 2006 identifies senior citizens as "people who are 60 years and above."
- ▶ According to the 2001 census, Nepal's elderly population constitutes 6.5 percent of the total population of the country. During the years 1991-2001, the annual elderly population growth rate was 3.39 percent as against the national population growth rate of 2.3%.
- ▶ According to the 2011 census, the percentage of elderly population has increased to 9.1 percent (male 4.6 and female 4.5%)

Changes in old age

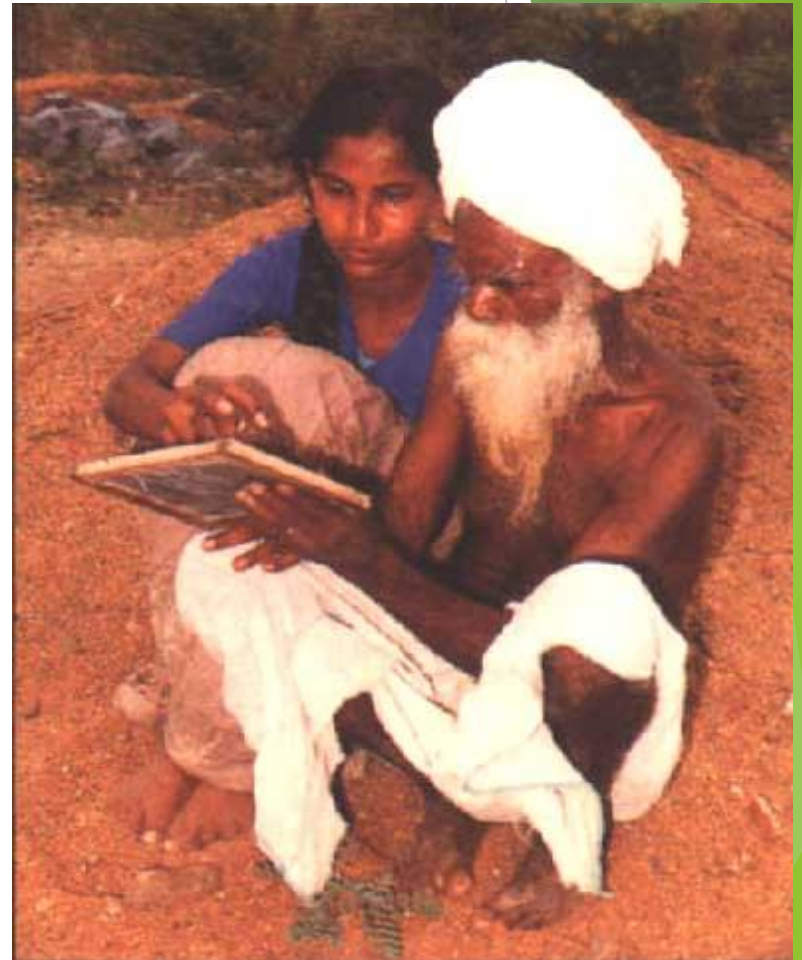


Physiological/Psychological/ Biochemical changes

- ▶ **Decrease number of functioning cells**
- ▶ **Reduced cellular metabolism**
- ▶ **Decrease retention time, behavior change**
- ▶ **Osteoporosis**
- ▶ **Saliva secretion low**
- ▶ **Increase incidence of atherosclerosis and decrease function of heart muscle**

Changes in old age

- ▶ **Physiological**
- ▶ **Psychological**
- ▶ **Biochemical**



Physiological/Psychological/ Biochemical Changes during old age

- ▶ **Decrease glomerular filtrate rate**
- ▶ **Activity of endocrine system reduced**
- ▶ **Changes in enzymes and lack specific activity**
- ▶ **Changes in structure of collagen**
- ▶ **Immuno-competence of animals decrease with age**

Dietary Guideline



Dietary Guideline

- ▶ Consider like/dislike of food for individual
- ▶ Provide easily digestible foods
- ▶ Adequate fluid/water to prevent constipation/dehydration
- ▶ Include fiber to prevent constipation
- ▶ Calories intake adjusted to maintain constant weight/avoid calorie dense foods
- ▶ Calcium rich food(milk and milk products) and iron rich food (GLVs and others) to prevent osteoporosis and anemia.

Dietary Guideline (Contd)

- ▶ Coffee, tea and cola drink, should be restricted to prevent insomnia.
- ▶ Avoid too many sweets, salty foods high fat content foods (fried foods) to control BP, obesity, CVD and indigestion.
- ▶ Small and frequent meals to prevent indigestion.
- ▶ Mild physical activity, recreation and entertainment to avoid worries and monotony.



Nutritional requirement

- ▶ Energy (Kcal) 25% less than normal requirement
- ▶ Protein (gm) 1-1.4gm/kg with good quality protein: **exception-renal failure**
- ▶ Fat (gm) 50 gm with high EFA



- ▶ Vitamin B – After 50, stomach produces less gastric acid making it difficult to absorb vitamin B-12—needed to help keep blood and nerves vital. We need to get them the recommended daily intake (2.4 mcg) of B12 from fortified foods or a vitamin supplement.



- ▶ Vitamin D - We get most of our vitamin D intake—essential to absorbing calcium—through sun exposure and certain foods (fatty fish, egg yolk, and fortified milk).
- ▶ With age, skin is less efficient at synthesizing vitamin D, so we also need to consult doctor about supplementing your diet with fortified foods or a multivitamin.

Egg yolk



mushrooms

Soya



Fish

Physical Activity Recommendations

- ▶ 30 minutes a day
- ▶ Intermittent physical activity also increases caloric expenditure

