

NUTRITION IN COMPLETE DENTURE PATIENTS



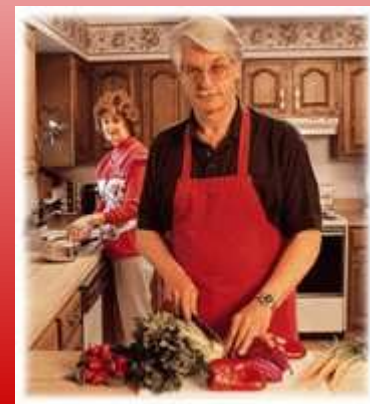
LEARNING OBJECTIVES

At the end of the lecture session the learner should be able to

- Know the Physiologic changes associated with aging
- List recommended Dietary Allowances for the Elderly
- Know balanced diet for an elderly for a day
- Detect Physical signs of Nutrient Deficiencies
- Perform Dietary Counseling for Prosthodontic Patients



Factors contributing to nutritional problems in the elderly .



The factors that contribute to the nutritional problems in the elderly are as follows:

i. Physiologic changes associated with aging.

i. Psychosocial aspects

ii. Drugs

iii. Economic factors

iv. Changes in oral conditions

1. Physiologic changes associated with aging

The elderly are often at high risk for developing a nutritional deficiency due to the physiologic changes accompanying aging.

Knowledge of the effects of the aging processes on nutritional status, nutrient requirements of the elderly, and the factors affecting dietary intake will help the prosthodontist provide meaningful guidance to the elderly patient in achieving improved oral health.

Psychosocial factors

Exton Smith has categorized malnutrition in the elderly according to various primary and secondary causes.

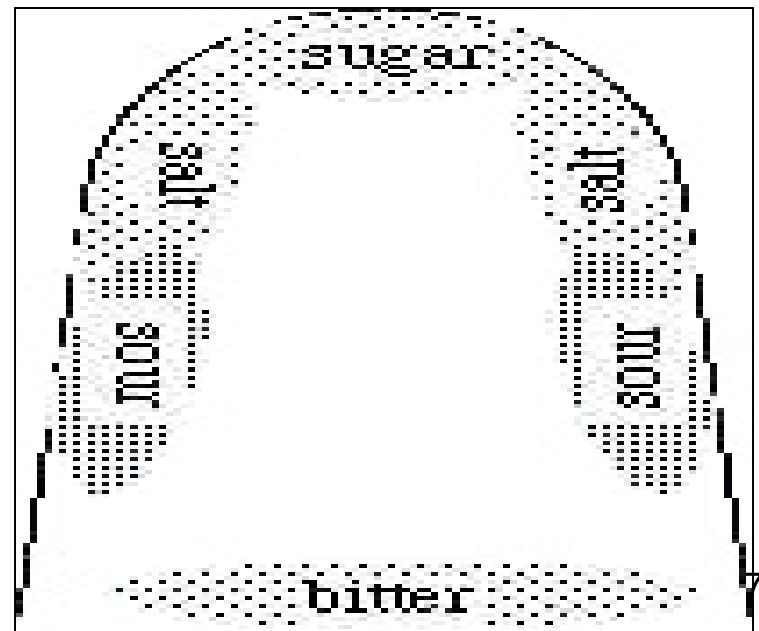
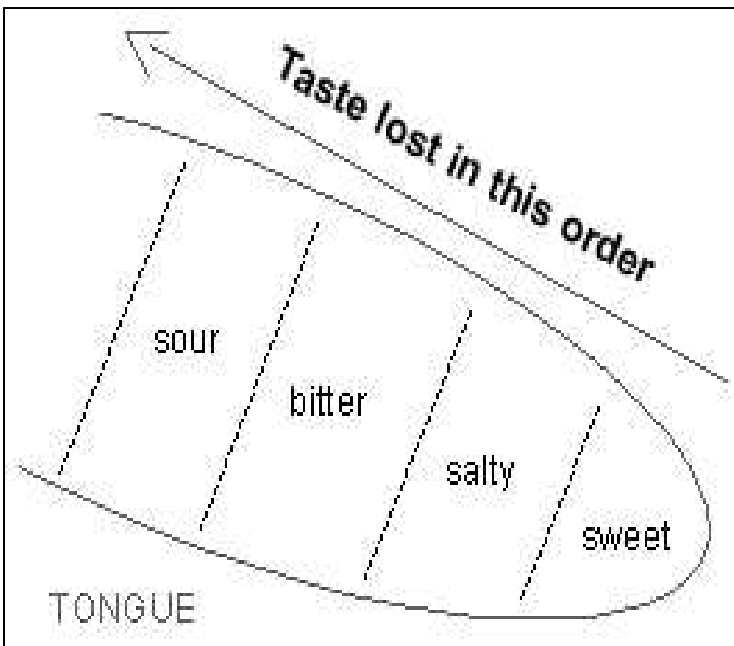
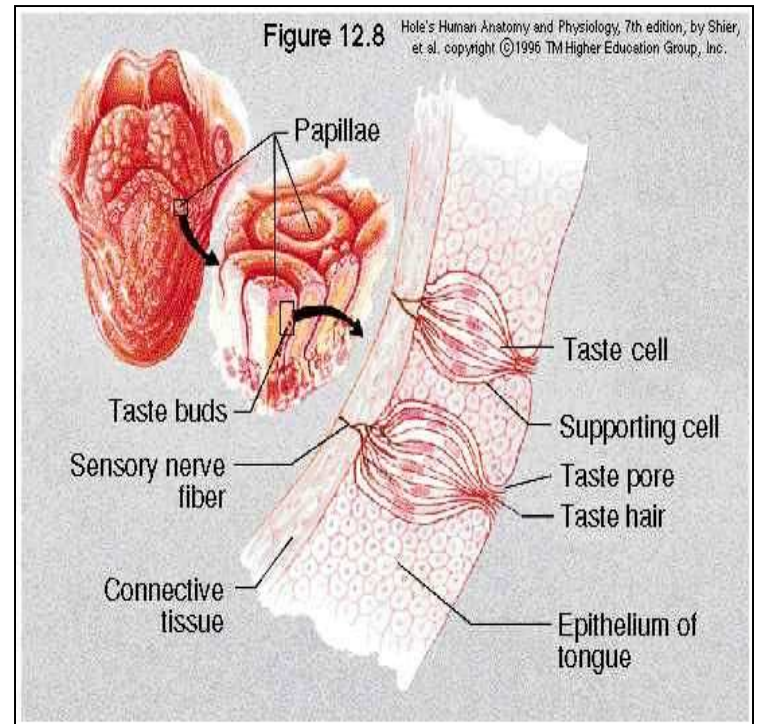
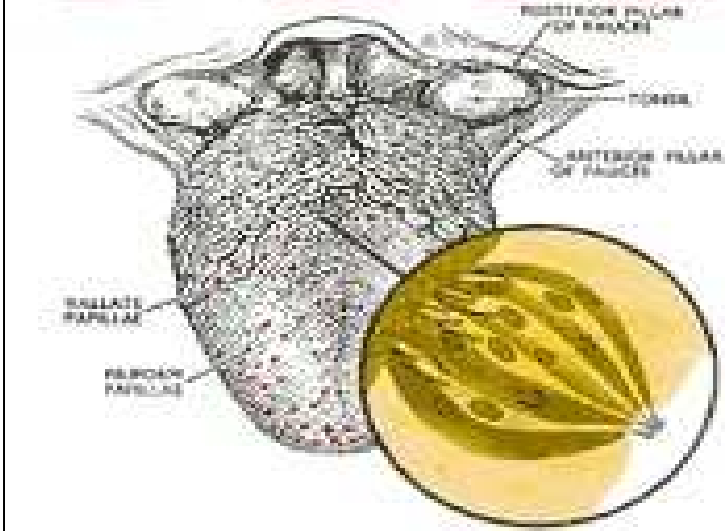
I] Primary causes

- ▀ Ignorance of balanced diet.
- ▀ Inadequate income
- ▀ Social isolation
- ▀ Physical disability
- ▀ Mental disorders

II] Secondary causes

- ▀ Alcoholism
- ▀ Increased use of drugs
- ▀ Edentulism

TASTE



Salivary function

Xerostomia is a condition of dry mouth as a result of diminished salivary flow commonly found in the elderly. It is not a direct consequence of the aging process but may result from one or more factors affecting salivary secretion.

Emotions (especially fear or anxiety), neuroses, organic brain disorders, and drug therapy all can cause xerostomia.

Recommended Dietary Allowances for the Elderly

	Men	Women
Age	51+	51+
Weight (kg)	70	55
(lb)	154	120
Height (cm)	178	163
(in)	70	64
Protein (g)	56	44
Vitamin A (μ g RE)+	1000	800
Vitamin D (μ .g)+	5	5
Vitamin E (mg a-TE)	10	8
Vitamin C (mg)	60	60
Thiamine (mg)	1.2	1.0
	1.4	1.2
	16	13

THE FIVE FOOD GROUPS

All the nutrients necessary for optimal health in the desirable amounts can be obtained by eating a variety of foods in adequate amounts from the five food groups.



These are

1. Vegetable Fruit Group :

Four servings of vegetables and fruits,
subdivided into three categories



- Two servings of good sources of vitamin C, such as citrus fruits, salad greens, and raw cabbage
- One serving of a good source of provitamin A, such as deep green and yellow vegetables or fru



2]Bread – Cereal Group

Four servings of enriched bread, cereals, and flour products



3.] Milk - Cheese group

Two servings of milk and milk based foods, such as cheese (but not butter)



4.] Meat, Poultry, Fish and Beans Group

Two servings of meats, fish poultry, eggs, dried beans and peas, and nuts

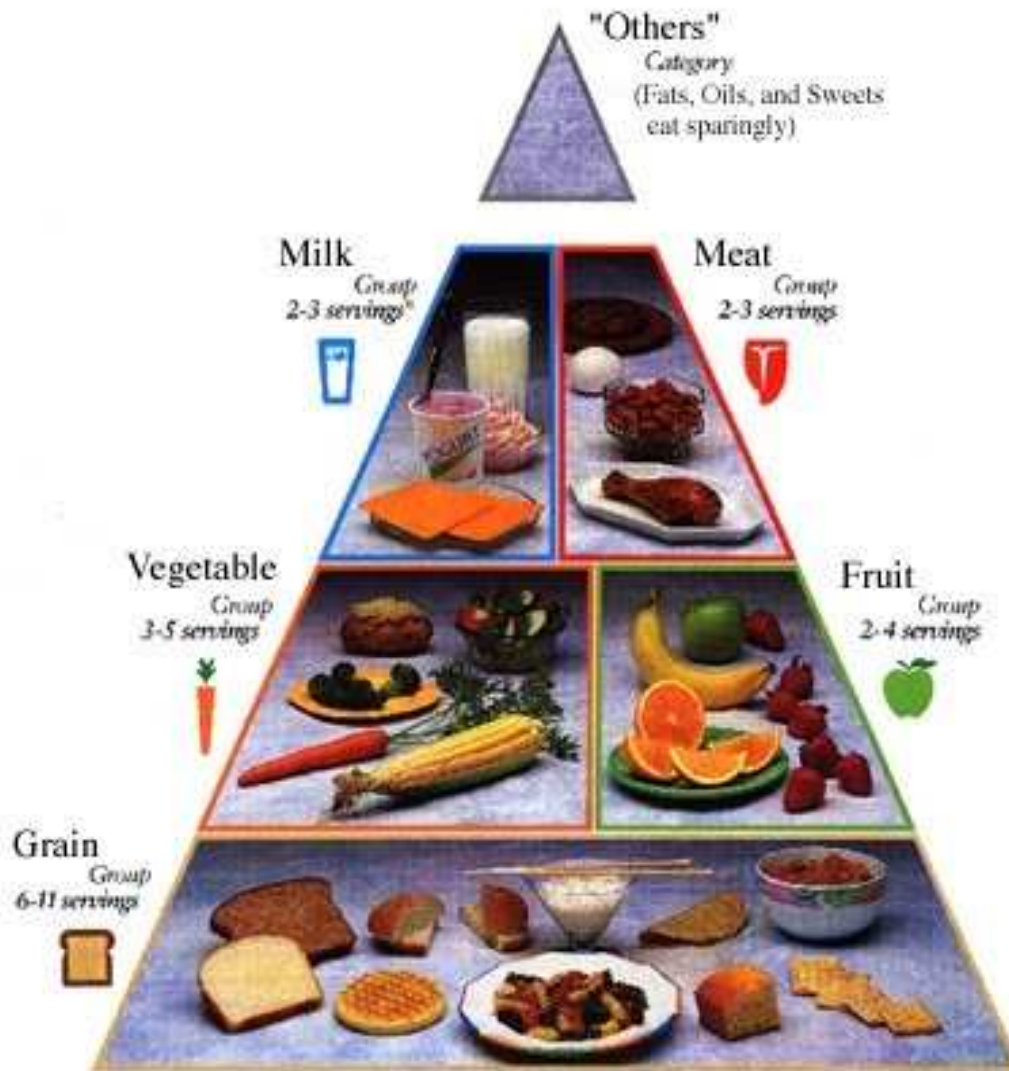


5.] Fats, Sugar and Alcohol Group

Additional miscellaneous foods, including fats and oils, sugar and alcohol; the only serving recommendation is for about 2 to 4 tablespoons of polyunsaturated fats, which supply essential fatty acids.



DAILY FOOD GUIDE PYRAMID



*Preteens, teens and young adults (age 11 to 24) and pregnant and lactating women need 4 servings from the Milk Group to meet their calcium needs.

NUTRITIONAL NEEDS FOR THE ELDERLY

MAJOR FOOD SOURCES OF NUTRIENTS

NUTRIENTS	Foods
ENERGY	Cereals, pulses, roots and tuber fats and oils, sugar and jaggery
PROTEIN	Milk, egg, fish, meat, liver, pulses, nuts and oilseeds.
FAT	Butter, ghee, vegetable oils, hydrogenated fats, nuts and oilseeds.
CARBOHYDRATES	Cereals, pulses, sugar and jaggery, roots and tubers.
FIBERS	Green leafy vegetables, fruits, unrefined cereals, pulses, and legumes
CALCIUM	Milk and milk products, ragi, green leafy vegetables

BALANCED DIET FOR AN ELDERLY FOR A DAY



Foodstuffs	Quantity (raw) in g	
	Males	Females
Cereals	350	225
Pulses	50	40
Vegetables	200	150
Green leafy vegetables	50	50
Roots and tubers	100	100
Fruits	200	200
Milk and milk products	300	300
Sugar	20	20
Fats and oils	25	20

Physical signs of Nutrient Deficiencies

Nutrient	Physical signs
Protein	<ul style="list-style-type: none">•Edema•Dull, dry, sparse, easily plucked hair•Parotid gland enlargement,•Muscle wasting
Iron	<ul style="list-style-type: none">•Pallor•Pale, atrophic tongue•Spoon nails•Pale conjunctiva
Niacin	<ul style="list-style-type: none">•Nasolabial seborrhea•Fissuring of eyelid corners•Angular fissures around mouth•Papillary atrophy•Pellagrous dermatitis•Mental confusion

Dietary Counseling of Prosthodontic Patients

One expectation of patients seeking new dentures is that they will be able to eat a greater variety of foods. Such patients often are receptive to suggestions aimed at improving the quality of their diets. Nutrition screening begins at the first appointment so that counseling and follow up can occur during the course of treatment.

Risk Factors For Malnutrition In patients wearing

Complete denture prosthesis:

- ✚ Unplanned weight gain or loss of >10 lb in the last 6 months
- ✚ Undergoing chemotherapy or radiation therapy
- ✚ Poor dentition or ill-fitting prosthesis
- ✚ Oral lesions – glossitis, cheilosis, or burning tongue
- ✚ Severely resorbed mandible
- ✚ Alcohol or drug abuse

Nutrition Guidelines For Prosthodontic Patients

- ✚ Eat a variety of foods
- ✚ Build diet around complex carbohydrates fruits vegetables, whole grains, and cereals.
- ✚ Eat at least 5 servings of fruits and vegetable daily
- ✚ Select fish, poultry, lean meat, or diet peas and beans every day.
- ✚ Obtain adequate calcium
- ✚ Limit intake of bakery products high in fat and simple sugars
- ✚ Limit intake of processed foods high in sodium and fat
- ✚ Consume 8 glasses of water daily.

Dietary Suggestions for patients wearing Complete denture prosthesis.

Modifying food selection and Food Habits

The problem of selecting a properly nutritious diet for an elderly person is not simple, because one or more of the following environmental factors may influence food selection and eating habits:

- Deficient dentition
- Low income
- Ingrained food patterns
- Excessive introspection

TEACHING THE PATIENT TO MASTICATE WITH THE NEW

PROSTHESIS:

The ability to manage the physical consistency of food can be easier for a new denture wearer if an analysis of the jaw movements involved in mastication is made. The process of eating actually involves three steps; biting or incising; chewing, or pulverizing; and, finally swallowing.



CONCLUSION...