

Block 2

Basic Concepts in Nutrition



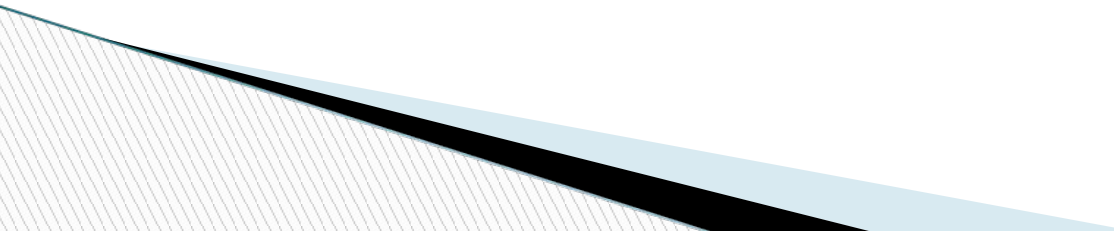
Unit 8

Planning Balanced Diets

By: Prof. Rekha Sharma Sen



Objectives

- **Describe the concept of a balanced diet**
 - **Discuss the classification of food**
 - **Explain the concept of recommended dietary intakes**
 - **Classify food into functional groups and**
 - **Identify the major factors influencing planning of balanced diets.**
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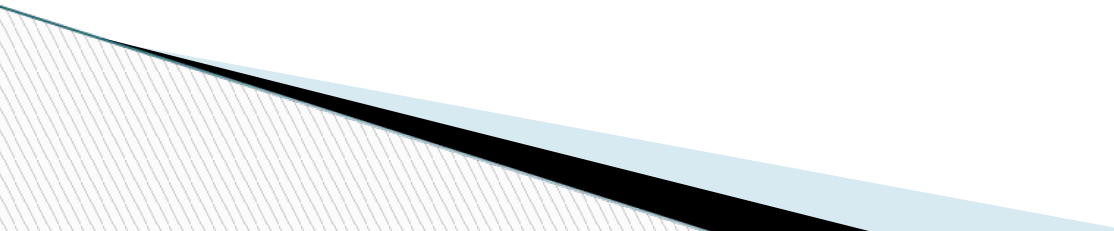
What is a Balanced Diet?

- **It contains different types of foods in such quantities and proportions that the need for calories, proteins, fats , minerals and vitamins is adequately met and a small provision is made for extra nutrients to withstand the duration of leanness**

not eating BD – under or over nutrition

What is Recommended Dietary Intake?

- ❑ It is the amount of nutrient to be actually consumed in order to meet the requirements of the body
- ❑ Requirement – for a particular nutrient is the minimum amount that needs to be consumed to prevent symptoms of deficiency and to maintain satisfactory levels of nutrients in the body.
- ❑ Safety margin over and above the minimum requirement to ensure good health; for covering factors like – variation in individual requirements, cooking losses, nature of diet, periods of leanness/low intake
- ❑ So $RDI = \text{requirement} + \text{safety margin}$

- ❑ **RDIs are set high enough to meet the needs of almost all healthy people**
 - ❑ **RDIs do not apply to those suffering from disease which influences nutrient needs.**
 - ❑ **RDI for adults based on sex, age, body size and activity level**
 - ❑ **RDIs available for sedentary, moderate, heavy work – man and woman; pregnant woman, lactating woman – 0-6 months, 6-12 months; infants - 0-6 months, 6-12 months; children – 1-3 yrs, 4-6 yrs, 7-9 yrs;**
 - ❑ **10-12 yrs, 13-15 yrs, 16-18 yrs boys and girls**
 - ❑ **Expressed in gms for proteins and kcal for energy; in infancy as per kg body weight**
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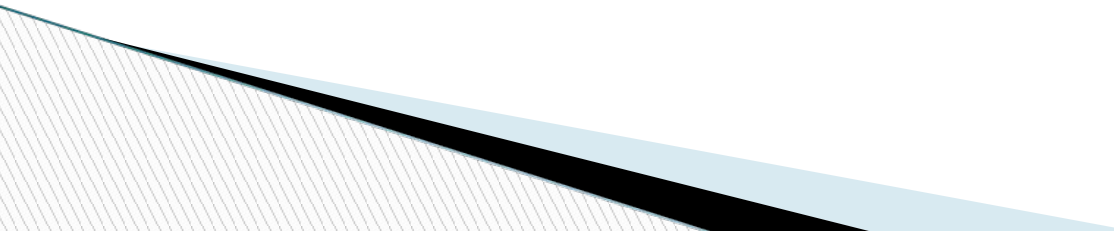
- ❑ **RDIs more during pregnancy and lactation.**
- ❑ **The amount of a food consumed would depend on RDI for that nutrient.**

Planning Balanced Diets

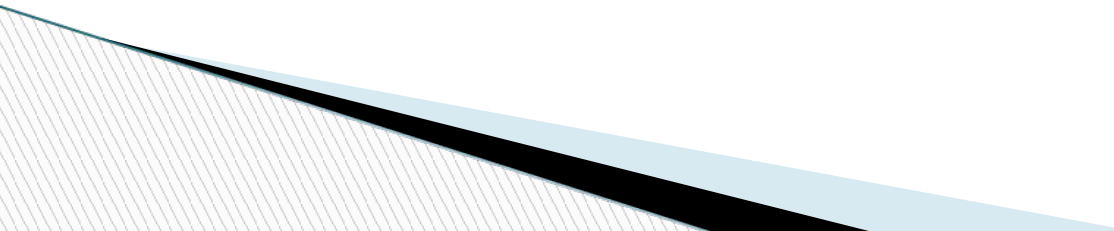
- ❑ **A balanced diet is specific for an individual of a given age and sex. For adults, activity level also considered.**
- ❑ **Region and income considerations:**
 - **Use foods available in the region.**
 - **Customs, social and religious practices also important.**
 - **Seasonal factors also imp.**
 - **Meal patterns should also be considered.**
 - **Taboos related to food.**
 - **Individual likes and dislikes.**

Income also plays imp role.

Food Groups

- ❑ **Group 1: Energy giving – carbohydrate and fat rich – cereals, roots and tubers, sugar, jaggery, fats and oils**
 - ❑ **Group 2 : Body building – milk and its products, meat and its products, fish, egg, pulses, nuts and oilseeds**
 - ❑ **Group 3 : Protective/regulatory – fruits and vegetables, yellow and orange fruits, citrus fruits, others GLV, yellow and orange Vegetables, others.**
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Meal Planning

- ❑ **Once you have decided the foods from 3 food groups, then you have to distribute these over the meals during the day. So decide the number and pattern of meals**
 - ❑ **Specific foods to be selected for inclusion in each meal**
 - ❑ **The dishes which would be prepared using these foods**
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Food groups	Food item selected	Menu / ingredients used for preparation
EG	Rice, fat	Rice
BB	Pulse – rajmah, onion, tomato, fat	Rajmah curry
P/R	Onion, beans, tomato	Dry beans vegetable

Food groups	Food item selected	Menu (ingredients)
Energy-giving	Rice, fat, potato	Idlis (rice and urad dal)
Body-building	Urad dal, arhar (tur) dal	Sambar (arhar dal, ladies finger, potato, drumstick, brinjal, fat)
Protective/ regulatory	Ladies finger, Drumstick, brinjal	

Factors Involved in Planning Balanced Diets

- ❑ **Nutritional adequacy**
 - ❑ **Economic considerations**
 - ❑ **Food Acceptance**
 - ❑ **Food Availability**
 - ❑ **Meal frequency and meal pattern**
 - ❑ **Economizing on time, labour and fuel**
 - ❑ **Variety in meals**
 - ❑ **Satiety value**
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