# BALANCED DIET AND

FOOD GROUPS

#### BALANCED DIET

A Balanced diet is defined as one which contains different items of food in such quantities and proportions that the need of all the nutrients is adequately met.



# FACTORS AFFECTING THE NUTRITIONAL REQUIREMENT

- Age
- Sex
- Body Size
- Physiological Conditions
- Climate
- Physical Activity

# AGE:

Nutritional requirement is more during the periods of body growth & development. e.g. Birth to Six years.

Adolescent years.

At these stages growth is fast therefore Nutrients required more are- Body Building nutrients such as Protein, Calcium & Iron.

# SEX:

Men are more active than women so they need more energy than women of same age group. Muscular tissues are more in men, their body size is larger, therefore, boys of growing age need more body building nutrients ( Proteins, Calcium) as compared to girls of same age.

# **BODY SIZE:**

Among two persons of same age but different weight, the person with more weight will have higher requirement for protein, energy as compared to others. Requirement of protein is 1gm/kg body weight.

#### PHYSIOLOGICAL CONDITIONS:

- \* PREGNANCY
- \* LACTATION
- \* CONVALESCENCE AFTER PROLONGED DISEASE
- \* POST OPERATIVE STAGE
  - Requirement of Proteins, Calories, Iron, Calcium & Vitamin B Complex increases.

# **CLIMATE:**

People living in cold conditions consume more of energy as compared to those living in Hot Conditions.

# PHYSICAL ACTIVITY

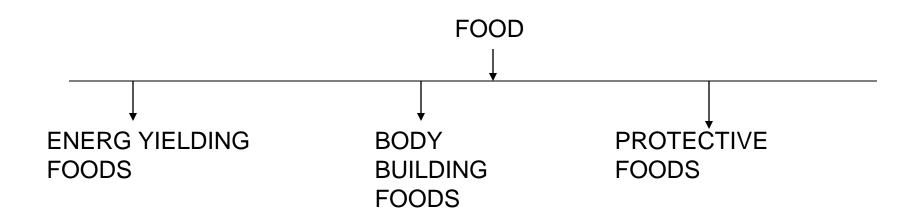
- \* SEDENTARY WORK Office work
  - Bank Employees
  - Teachers
- \* MODERATE WORK Students
  - House Wives
- \* HEAVY WORK Maid Servants
  The more your work, more will be the requirement of energy.

#### **CLASSIFICATION OF FOODS**

For planning a Balanced diet different items of food are required, which are classified as :-

- Based on their Functions.
- Based on their Nutritive Value.
- Based on their Type.

#### **BASED ON THEIR FUNCTIONS**



#### ENERGY YIELDING FOODS



CARBOHYDRATES – Potato,
 Root-Vegetables, Sugar, Jaggery.

• FATS- Butter, Ghee, Oil, Oil Seeds

#### **BODY BUILDING FOODS:**

 They are required for tissue formation & repair of tissues.

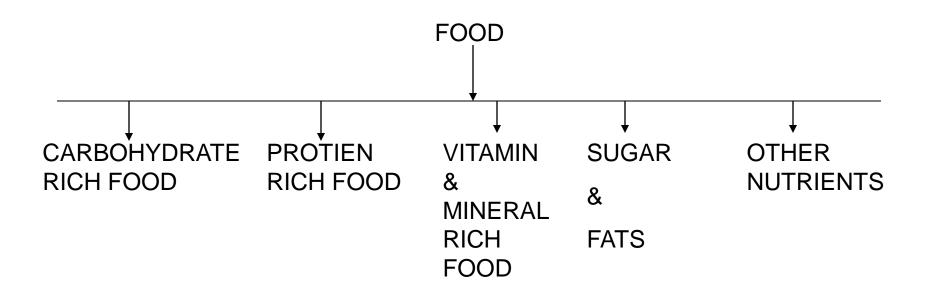
They are PROTIENS
MINERALS

 There sources are – Milk, Curd, Cheese, Eggs, Meat, Fish, Cereals, Pulses,
 Dry fruits, Beans, Groundnut etc.

#### **PROTECTIVE FOODS**

They are required for the regulation of body processes & protection against diseases - All sources of Vitamins & Minerals e.g. milk, curd, fruit, green leafy vegetables & other vegetables.

#### BASED ON NUTRITIVE VALUE



- \* <u>CARBOHYDRATE RICH FOODS ARE –</u> Rice, Wheat, Maize, Millets, Potatoes, Sweet potato, Colocasia etc.
- \*\* PROTIEN RICH FOODS Milk, Curd, Cheese, Khoa, Meat, Fish, Egg, Pulses, Peas, Rajmah, Soyabean & Nuts.
- \*\*\* <u>VITAMIN & MINERAL RICH FOODS</u> —

  <u>Green leafy vegetables such as -</u>

  Spinach, Fenugreek, Mustard Leaves, Carrot & Radish leaves, <u>Yellow & Orange fruits</u> Mango, Papaya, Tomato, Citrus fruits.
- \*\*\*\* FATS & SUGARS Ghee, Oil, Butter, Sugar, Jaggery and Honey.
- \*\*\*\*\*Other Nutrients & fibre rich foods whole grain cereals & pulses, fruits as apple, melon etc.

#### **SEVEN FOOD GROUP PLAN**

Food Group	Foods included	Nutritional contribution
I	Cereals	Carbohydrates, B-complex vitamins
II	Pulses/meat, fish, eggs	Protein, B-complex vitamins
III	Vegetable Group A – Green leafy vegetables, fruits	Vitamins and minerals
IV	Vegetable Group B – root Vegetables and other vegetables	Carbohydrates, minerals, fibre
V	Milk and milk products	Protein, calcium
VI	Fats and oils	Energy and fat soluble vitamins
VII	Sugar and Jaggery	Carbohdrates

### FIVE FOOD GROUP

Food Group	Food stuffs included	Nutritional Contribution
Food Group I Cereals and root vegetables	Wheat, rice, maize, millets, jowar etc. potatoes, sweet potato, colocasia, yam etc.	Energy giving foods
Food Group II  Milk and milk products,  pulse, dry fruits, oil seeds,  meat, fish eggs	Milk, curd, cheese, khoa etc. pulses, peas, rajmah, gram, cashew nuts, almonds, groundnut, meat, fish eggs	Protein rich foods
Food Group III Green leafy vegetables and fruits	Mustard leaves, spinach, fenugreek, radish and carrot leaves etc yellow and orange fruits and vegetables such as papaya, mango, tomato, carrots, citrus fruits, e.g. orange, lemon mussami etc., guava, amla etc.	Minerals and vitamin rich foods
Food Group IV Other vegetables and fruits	Beans, brinjals, lady's finger gourds etc. apple, banana, litchi, peaches etc.	Minerals, vitamins and fiber rich foods
Food Group V Sugars, fats and oil	Sugar, jaggery, honey etc. vegetables oitls, ghee, butter etc.	Energy rich foods

#### Thank You