Balanced diet and food groups
Introduction

• Most of the people do not have access to food composition tables, nor knowledge or time to look into the nutrient content of foods they normally consume.

• People need to be guided about balancing the intake of different nutrients in their diet and make healthy food choices.
• Food groups classify foods into categories, depending upon their type, nutritional contribution and functions.

• These food groups can be used to plan diets which achieve nutrient intakes according to RDA
Concept of balanced diet

• It is trying to balance the amount of different types of foods eaten everyday so that it becomes a nutritionally adequate diet.

• A balanced diet is one that includes foods from all food groups during the day. The quantities and proportions of these foods need to be such that they fulfil our daily requirements for all nutrients.
• In addition the nutrients should be in such amounts that a little bit can be stored in the body to take care of the days when food intake is insufficient.

• Balanced diet usually provide 50-60% energy from carbohydrates, 10-15% energy from proteins and 20-30% energy from fats.

• In addition diet should provide macronutrients and other protective substances like phytochemicals in sufficient quantities needed for maintaining optimum health.
Basic food groups

• Foods can be grouped into categories based on the type or nutrients that they supply.

• The basic food group classification is based on the physiological role played by the foods of each group in our body.
• Thus we have

- Energy giving foods- cereal grains, fats & oils, sugar and products made from these foods

- Body building foods – pulses, nuts, oilseeds, milk & milk products, meat, fish, poultry and products made from these.

- Protective foods – fruits and vegetables which supply vitamins and minerals
ICMR classifies foods into five groups

<table>
<thead>
<tr>
<th>Food group</th>
<th>Main nutrient supplied</th>
<th>Other nutrients present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal grains &amp; products</td>
<td>Energy, protein</td>
<td>Invisible fat, B vitamins, iron, calcium, fibre</td>
</tr>
<tr>
<td>Pulses and legumes</td>
<td>Protein, energy</td>
<td>Invisible fat, B vitamins, iron, calcium, fibre</td>
</tr>
<tr>
<td>Milk &amp; meat products</td>
<td>Protein,</td>
<td>Fat, riboflavin, calcium, vitamin B₁₂, fat soluble vitamins</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>Vitamins, minerals and fibre</td>
<td>Invisible fat, trace minerals and vitamins</td>
</tr>
<tr>
<td>Fat &amp; sugars</td>
<td>Energy</td>
<td>Essential fatty acids</td>
</tr>
</tbody>
</table>
How the food group system helps us

• As a tool for nutritional assessment
• As a tool for nutrition education
• Planning diets for normal healthy people
• In providing variety to the diet
• Planning therapeutic diets
• In formulation of nutrition labels
The Food Pyramid

- **Fats, oils, and sweets**
  - Use sparingly

- **Milk, yogurt, and cheese group**
  - 2-3 servings

- **Meat, poultry, fish, dry beans, eggs, and nuts group**
  - 2-3 servings

- **Fruit Group**
  - 2-4 servings

- **Vegetable group**
  - 2-4 servings

- **Bread, cereal, rice, and pasta group**
  - 6-11 servings