

1. Individual Needs Through the Life Cycle:

Infancy (0-2 years):	Nutritional Focus: Breast milk or formula is the main source of nutrition. Key nutrients include fats (for brain development), protein (for growth), and vitamins A and D. Foods: Breast milk/formula, pureed fruits/vegetables, soft foods after 6 months.
Childhood (2-12 years):	Nutritional Focus: Growth and energy. A balanced diet with protein, carbohydrates, fats, vitamins, and minerals to support development. Foods: Whole grains, fruits, vegetables, lean meats, dairy, nuts, and seeds.
Adolescence (13-19 years):	Nutritional Focus: Increased energy needs due to growth spurts. Importance of iron, calcium, and vitamin D for bone development and maintaining energy levels. Foods: Balanced meals with protein (chicken, beans), dairy (milk, cheese), fruits, vegetables,
Adulthood (20-65 years):	Nutritional Focus: Maintenance of health and prevention of chronic diseases. Focus on fiber, healthy fats, lean proteins, and a reduced intake of sugar and processed foods. Foods: Whole grains, lean proteins, fruits, vegetables, healthy fats (e.g., olive oil, avocado).
Older Adults (65+ years):	Nutritional Focus: Focus on maintaining bone health, digestion, and heart health. Higher need for protein and calcium. Foods: Calcium-rich foods (e.g., dairy, leafy greens), lean protein, fiber-rich foods, and hydration.

2. Energy

Definition:	The capacity of food to provide fuel for the body to perform physical and biological functions. It is measured in kilojoules (kJ) or kilocalories (kcal), and comes from macronutrients like carbohydrates, fats, and proteins.
Sources of Energy:	<ul style="list-style-type: none"> Carbohydrates: Main energy source (e.g., bread, pasta). Fats: Provide long-lasting energy (e.g., nuts, oils). Protein: Helps with muscle repair, but not a primary energy source (e.g., meat, beans)
Energy Needs:	Varies based on age, activity level, and sex. Teenagers need more energy due to growth and increased activity levels.

3. Eatwell Guide:

What is the eatwell guide?	The Eatwell Guide shows the proportions in which different groups of foods are needed in order to have a well-balanced and healthy diet.
What are the recommendations?	<ol style="list-style-type: none"> Eat at least 5 portions of a variety of fruit and vegetables every day. Base meals on potatoes, bread, rice, pasta or other starchy carbohydrates; choosing whole grain versions where possible. Eat some beans, pulses, fish, eggs, meat and other proteins (including 2 portions of fish every week, one of which should be oily). Have some dairy or dairy alternatives (such as soya drinks); choosing lower fat and lower sugar options. Choose unsaturated oils and spreads and eat in small amounts. Drink 6-8 cups/glasses of fluid a day. If consuming foods and drinks high in fat, salt or sugar have these less often and in small amounts.

Year 9: Food technology

6. Food Allergies and Intolerances

Food Allergies:		Food Intolerances:	
Common Allergens:	Nuts, shellfish, dairy, eggs, soy, wheat, and peanuts..	Lactose Intolerance:	Difficulty digesting lactose (milk sugar), leading to digestive discomfort.
Symptoms:	Can include hives, swelling, difficulty breathing, and anaphylaxis (severe, life-threatening reaction).	Gluten Sensitivity:	Similar to celiac disease but does not cause long-term damage to the intestines.
Management:	Avoidance of allergens, carry emergency medication (e.g., EpiPen), and read food labels carefully.	Symptoms of Intolerances	Bloating, gas, diarrhea, or stomach cramps after eating the trigger food.

4. Micronutrients

Definition:		Micronutrients are vitamins and minerals needed in small amounts but are essential for health, growth, and development.	
Vitamins:		Minerals:	
Vitamin A:	Supports vision, immune function, and skin health. Found in carrots, sweet potatoes, and spinach.	Calcium:	Essential for strong bones and teeth. Found in dairy products, leafy greens, and fortified alternatives.
Vitamin C:	Helps protect cells and supports the immune system. Found in oranges, strawberries, and broccoli.	Iron:	Important for carrying oxygen in the blood. Found in red meat, beans, and fortified cereals.
Vitamin D:	Supports bone health and helps the body absorb calcium. Found in sunlight, oily fish, and fortified foods.	Magnesium:	Supports muscle and nerve function. Found in nuts, seeds, and whole grains.

3. Macronutrients:

Definition:	Macronutrients are nutrients required by the body in large amounts that provide energy and are needed for growth and development.
1. Carbohydrates:	Function: Provide energy. Sources: Bread, pasta, rice, potatoes, fruits, and vegetables.
2. Proteins:	Function: Help build and repair muscles and tissues. Sources: Meat, fish, eggs, beans, tofu, nuts, dairy products.
3. Fats:	Function: Provide long-term energy, protect organs, and help with vitamin absorption. Sources: Avocados, nuts, seeds, olive oil, butter.