

PUBLIC NUTRITION AND HEALTH

STUDY NOTES

- **Malnutrition** is cause of 50% deaths of children under five years of age.
- Almost one third of infant bond in India are low birth weight babies.
- Maximum number of children is suffering from micronutrient deficiencies such as iron, zinc, Vitamin A, iodine and folic acid.
- India faces the problem of under nutrition due to altered dietary pattern and lifestyle.
- In today's time food choices have become less healthy as people are obtained more processed food, fast foods and western types of food.
- India is facing double burden of malnutrition. Malnutrition is the problem of bad nutrition.
- **Dietary pattern and lifestyle** of people are affecting their nutrition level.
- Community is a group of people who share common characteristics like common lifestyle or same health problem.
- Food choices have become less healthy, more processed food, fast foods, snacks, and western type of foods comprises more sugar, fat, salt and less no of nutrients and fibre.
- **Malnutrition** is coexistence of undernutrition and overnutrition.
- Public health nutrition is the field of study for good health by preventing nutrition related problems.
- **Public nutrition** deals with the nutritional, biological, behavioral, social and managerial sciences.
- Public nutritionist plan strategies and implement it for the good health of the public.
- Nutritional problems in India: PEM (Protein Energy Malnutrition).
- A balanced diet is one which contain different types of body group in adequate quantity and in right proportion so as to meet the nutritional requirements of our body.
- **Stunting** refers to the situation when height is less than adequate for age.
- Wasting refers to incorrect weight related to height.
- Most common nutritional disorder is iron deficiency anaemia. Iron deficiency anaemia occurs when hemoglobin production is reduced as low level of hemoglobin in the blood.
- Vitamin A is important for healthy epithelium, normal vision and growth. Vitamin a deficiency is common cause of childhood blindness.
- **Iodine deficiency disorder** occur due to intake of iodine. Iodine is required for mental and physical growth and development of a person.
- Government of India launched several program to combat nutritional problem in India.
- ICDS is outreach program for early childhood care and development.
- Integrated child development services cover all vulnerable children of 0 to 6 year and pregnant and lactating mother.
- Nutrient deficiency control program, national prophylaxis program for prevention of blindness, National anaemia control programme, national iodine deficiency disorder.

- Mid-day Meal Programme for food supplementation and reduction in dropout rates from schools
- **Food security program** such as public distribution system, Annapurna scheme etc.
- **Health** is human right and government responsibility is to provide proper healthcare to the citizen.
- In India healthcare is provided at three different level first is primary second is secondary and third one is tertiary.
- **Primary health centres** is the first level of contact with the individual. Secondary level consist of hospitals and community health centres which deals with complex health problems, and tertiary is the third and highest level of healthcare which are regional hospitals and specialized hospitals.
- **Nutrition** is necessary as per the individual requirement. Balance diet play an important role to accomplish the needs of nutrient as per the body.

QUESTION BANK

MULTIPLE CHOICE QUESTIONS

- What is the cause of 50% of deaths of children under five years of age?
 (a) Over nutrition (b) Malnutrition (c) Poverty (d) Low birth weight
- Low birth weight babies refer to
 (a) Weigh less than 2500 g or 2.5 kg (b) Weight less than 3500 g or 3.5 kg
 (c) Weight less than 1000 g or 1 kg (d) Weight less than 2000 g or 2 kg
- Assertion (A):** There is widespread prevalence of growth retardation among pre-schoolers.
Reason (R): Almost half the children suffer from mild and moderate undernutrition.
 (a) Both A and R are true and R is the correct explanation of A.
 (b) Both A and R are true and R is not the correct explanation of A.
 (c) A is true but R is false.
 (d) A is false but R is true.
- Examples of micronutrients are
 (a) Iron, protein, B₁₂ (b) Zinc, iron, vitamin A
 (c) Vitamin A, folic acid, carbohydrates (d) Folic acid, protein, B₁₂
- Choose correct statement:**
Statement I: If nutritional problems are not controlled on time they affect our physical growth.
Statement II: Nutritional problems also affect mental and cognitive development of human.
 (a) Both statements are correct (b) Only I
 (c) Only II (d) Neither I nor II
- Non-communicable disease
 (a) Hypertension (b) Smallpox
 (c) Tuberculosis (d) Malaria
- India face "Double burden of malnutrition" refers to
 (a) Good and bad nutrition (b) Healthy and unhealthy nutrition
 (c) Undernutrition and overnutrition (d) Carbohydrates and proteins
- Which is the field of study concerned with good health through prevention of nutrition related illness and problems in the population?
 (a) Nutritional science (b) Public health nutrition
 (c) Clinical nutrition (d) Physical health
- Public nutrition is a special body of knowledge derived from _____, _____, _____ and managerial science.
 (a) Nutritional, Biological, Human, Social (b) Biological, Nutritional, Cognitive, Social
 (c) Nutritional, Natural, Biological, Cognitive (d) Nutritional, Biological, Behavioural, Social

10. Specific group of people who share common characteristics refers to
 (a) Community (b) Group (c) Individual (d) Organisation
11. Full form of PEM is
 (a) Protein Energy Malnutrition (b) Protein Efficient Mixture
 (c) Physical Energy Malnutrition (d) Physical Efficient Mixture
12. Stunting is said to be present when
 (a) Height is more than age. (b) Height is less than adequate for age.
 (c) Weight is more than height. (d) Weight is less than adequate for age.
13. Wasting refers to the situation when
 (a) Weight is not adequate to height. (b) Weight is more than height.
 (c) Height is less than adequate for age. (d) Weight is less than adequate for age.
14. Anthropometric measurements deals with
 (a) Weight (b) Height
 (c) Head chest circumference (d) All of these
15. PEM assessed by evaluating the
 (a) Protein intake (b) Physical Health
 (c) Anthropometric measurements (d) None of these
16. Undernutrition due to deficiency of food and energy is termed as
 (a) Kwashiorkor (b) Stunting (c) Marasmus (d) Micronutrients
17. Kwashiorkor is caused by
 (a) Deficiency of food and protein (b) Deficiency of energy
 (c) Malnutrition (d) Vitamin A
18. Hidden hunger is used to refer to
 (a) Macro-nutrients deficiency (b) Micro-nutrients deficiency
 (c) Malnutrition (d) Communicable diseases
19. Which of the following is not the cause of undernutrition?
 (a) Quantity and quality of resources are not appropriate.
 (b) Political, cultural, religious, economic and social system
 (c) Lack of knowledge about appropriate nutrition
 (d) None of these
20. The acronym IDA refers to
 (a) Iron deficiency anaemia (b) Iron deficiency accurate
 (c) Iron deficient amount (d) Iron decrease amount
21. When haemoglobin production is less which results in low level of haemoglobin in blood is the problem of
 (a) PEM (b) IDA (c) Goitre (d) Thyroid
22. Deficiency of vitamin A leads to
 (a) Weak epithelium (b) Night blindness
 (c) Poor growth and immunity (d) All of these
23. The term IDD refers to
 (a) Iron deficiency disorder (b) Iodine deficiency decreased
 (c) Iodine deficiency disorder (d) Iron deficiency decreased
24. Deficiency of iodine results in
 (a) Insufficient amount of thyroid hormone (b) Scurvy
 (c) Night blindness (d) Beri beri

25. Enlarged thyroid is known as
 (a) Anaemia (b) Goitre (c) Malnourished (d) Kwashiorkor
26. Which program is adopted by the Government of India to remove the problem of malnutrition?
 (a) National Education Policy (b) National Nutrition Policy
 (c) International Nutrition Policy (d) Mid-day meal
27. NNP deals with
 (a) Fortification of food (b) Production of low cost nutritious food
 (c) Control of micronutrients deficiencies (d) All of these
28. What is the full form of ICDS?
 (a) Integrated Child Development Scheme (b) Integration of Child Domain Schemes
 (c) Integrated Child Development Services (d) Individual Community Development Scheme
29. What do you understand by fortification of food?
 (a) Increasing the content of micronutrient (b) Consuming tablets containing vitamin and mineral
 (c) Less amount of nutrients in food (d) Proper preparing of food to avoid loss of nutrients
30. Which of the following is incorrect statement about the aim of ICDS?
 (a) To improve the nutritional and health status of children between 0 year and 6 years
 (b) To lay the foundation for proper psychological, physical and social development of the child
 (c) To reduce the mortality, morbidity and dropouts rates in the schools
 (d) To achieve less effective coordination of policy and implementation
31. MDM program comes under the
 (a) Food Security Program (b) Food Supplementation Program
 (c) National Food Program (d) All of the above
32. How many levels are operated in healthcare centres?
 (a) 3 (b) 2 (c) 1 (d) 5
33. Conflicts health problems are resolved at _____
 (a) Primary level (b) Secondary level
 (c) Tertiary level (d) At all the level
34. Which category is wrong to combat Public Nutrition Problem?
 (a) Diet based (b) Medicinal based strategy
 (c) Nutrient based (d) All of these
35. Which strategy is short term and specifically used for vitamin A, iron and folic acid in India?
 (a) Diet based (b) Medicinal based strategy
 (c) Diet based (d) All of these
36. Which of the following is first referral level?
 (a) Community health centre (b) Public health centre
 (c) Regional hospital (d) Specialised hospital
37. All India Institute of Medical Science (AIIMS) comes under which level?
 (a) Primary (b) Secondary
 (c) Tertiary (d) Community
38. Which of the following are Food Security Programme?
 (a) Public Distribution System (b) Antodaya Anna Yojana
 (c) Annapurna scheme (d) All of these
39. _____ is outreach program for early childhood care and development.
 (a) NNP (b) ICDS (c) MDM (d) PDS

40. Which of the following is not Nutrient Deficiency Control Program?
 (a) National Prophylaxis Program
 (b) National Anaemia Control Program
 (c) National Iodine Deficiency Disorder Control Program
 (d) None of these
41. _____ are at maximum risk for PEM.
 (a) Children (b) Women (c) Elderly (d) All of these
42. In which year the Government of India adopted the National Nutrition Policy?
 (a) 1991 (b) 1992 (c) 1993 (d) 1994
43. Swelling in the body is a symptom of which disease?
 (a) Protein deficiency Kwashiorkor (b) Iron
 (c) Mineral (d) Iodine
44. What is the mission of public health nutrition?
 (a) To prevent undernutrition and overnutrition problem of society
 (b) To prevent undernutrition and to maintain optimum nutritional status
 (c) To prevent overnutrition and maintain optimal nutrition status of individual
 (d) To prevent both under nutrition and overnutrition and to maintain optimal nutrition status of the population
45. Assertion (A): Fortification is adding the nutrient that is lacking in food stuff to ensure dietary requirement are full fill.
 Reason (R): India developed from agro deficit to agro surplus country creating need for storage and processing of agriculture product.
 (a) Both A and R are true and R is correct explanation.
 (b) Both A and R true but R is not correct explanation.
 (c) A is true R is false.
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46. ICDS is not for
 (a) Pregnant women (b) 0-6 age group children (c) Adolescent boys (d) Lactating mother
47. SSA refers to
 (a) Sarva Shiksha Abhiyan (b) Sarvy Suraksha Abhiyan
 (c) Sarva Shiksha Andolan (d) Sarva Shiksha Abhi
48. Which department accepted National Nutrition Policy in 1993 ?
 (a) Labour department (b) Ministry of Nutrition
 (c) Women and child development department (d) All of the above
49. Health care centre provided the services of
 (a) Monitor health (b) Restore health (c) Promote health (d) All of the above
50. What is the full form of TPDS?
 (a) Targeted public distribution system (b) Targeted private distribution system
 (c) Targeted public division system (d) Targeted public distribution social
51. ICDS provides services, except
 (a) Supplementary nutrition (b) Handsome amount as a gift
 (c) Immunization (d) Health checkup

Input Text Based MCQs

Read the passage and answer the questions that follow (52 to 55).

Nutrition is an important determinant of health. Globally health scenario has been changed due to advanced and modern lifestyle. Public nutritionist is well-trained and equipped for making strategies of good health promotion and prevention.

Public nutritionist include nutritional science, nutritional need in diseases throughout life cycle, nutritional assessment, nutritional care, and food science.

52. Public nutritionist can work in
(a) UNICEF (b) OXFAM (c) DFID (d) All of these
53. Which of the following is not the role of public nutritionist?
(a) Determinant of health (b) Strategies for health promotion
(c) Leads to obesity (d) Prevention from disease
54. Garima is feeling lethargic breathlessness and fitting on slide exertion. Identify the deficiency disease
(a) IDA (b) IDD (c) VAD (d) VITAMIN A
55. Which program talks about prevention of blindness?
(a) National prophylaxis program (b) Food supplementation program
(c) Wage employment scheme (d) National iodine control program

Read the passage and answer the questions that follow (56 to 58).

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ANSWERS

Multiple Choice Questions

1. (b) 2. (a) 3. (?) 4. (b) 5. (a) 6. (a) 7. (c) 8. (b) 9. (d) 10. (a)
11. (a) 12. (b) 13. (a) 14. (d) 15. (c) 16. (c) 17. (a) 18. (b) 19. (d) 20. (a)
21. (b) 22. (d) 23. (c) 24. (a) 25. (b) 26. (b) 27. (d) 28. (c) 29. (a) 30. (d)
31. (b) 32. (a) 33. (b) 34. (d) 35. (b) 36. (a) 37. (c) 38. (d) 39. (b) 40. (d)
41. (a) 42. (c) 43. (a) 44. (d) 45. (b) 46. (c) 47. (a) 48. (c) 49. (d) 50. (a)
51. (b)

Input Text Based MCQs

52. (d) 53. (c) 54. (a) 55. (a) 56. (d) 57. (c) 58. (a)

