

**GOVERNMENT COLLEGE (A)
RAJAHMUNDRY NAAC A⁺**

HEALTH & HYGEINE

STUDY MATERIAL

MULTIDISCIPLINARY COURSE

w.e.f. AY 2023-24

SEMESTER-III

Prepared by Microbiology department



ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION

Multidisciplinary Course

w.e.f. AY 2023-24

SEMESTER-III HEALTH AND HYGIENE

Credits: 2

2 hrs/week

The course is designed to provide a complete guidance on health and hygiene systems, guidelines for implementing and role of government and public in maintaining a healthy life. At the end of the course the student shall be able to understand –

- the importance of health and hygiene in life
- the importance of nutrition for a healthy life
- different health care programmes of India
- basic concept of health impact assessment as a means of assessing the policies, plans and projects using quantitative and qualitative techniques
- importance of community and personal health & hygiene measures
- Importance of food, social tenets, mental condition, physical activity on health

Learning Objectives:

- To provide knowledge on different health indicators and types of hygiene methods
- To impart knowledge on different health care programmes taken up by India
- To make student understand the latest concepts of health such as HIA, EIA, SIA and SEA
- To enable student with disaster mitigation strategies
- To create awareness on community health and hygiene
- To enrich knowledge on communicable and non-communicable diseases and their control
- To aware the student on the importance of food, social strategies, mental status and physical activities on health
- To introduce different community-based mobile apps on health to student and thereby to the community

Learning / Course Outcomes: On completion of this course, the students will be able to understand -

- What is a healthy diet
- How can we use available information to optimize our diet?
- Can nutrition be used for a healthy life?
- Is there a one-size-fits-all “good” diet or should we individualize our dietary goals?
- Disaster management and responsiveness of public in pandemic and epidemic diseases
- Assess the impact of policies on health and hygiene Health measures to consider while travelling
- Awareness in public through digital media viz., mobile apps

Unit I: Basics of Nutrition

10 Hrs.

1. Nutrition – definition, importance, Good nutrition and mal nutrition; Balanced Diet: Basics of Meal Planning
2. Carbohydrates –functions, dietary sources, effects of deficiency.
3. Lipids –functions, dietary sources, effects of deficiency.
4. Proteins –functions, dietary sources, effects of deficiency.
5. Brief account of Vitamins- functions, food sources, effects of deficiency,
6. Macro and micro minerals –functions, effects of deficiency; food sources of Calcium, Potassium and Sodium; food sources of Iron, Iodine and Zinc
7. Importance of water– functions, sources, requirement and effects of deficiency.

Unit II: Health

10 Hrs.

8. Health - Determinants of health, Key Health Indicators, Environment health & Public health; Health-Education: Principles and Strategies
9. Health Policy & Health Organizations: Health Indicators and National Health Policy of Govt. of India-2017; Functioning of various nutrition and health organizations in India viz., NIN (National Institution of Nutrition), FNB (Food and Nutrition Board), ICMR (Indian Council of Medical Research), IDA (Indian Dietetics Association), WHO-India, UNICEF-India

10. National Health Mission: National Rural Health Mission (NRHM) Framework, National Urban Health Mission (NUHM) Framework
11. Women & Child Health Care Schemes: Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+); Janani Shishu Suraksha Karyakaram (JSSK); Rashtriya Bal Swasthya Karyakram(RBSK); India Newborn Action Plan (INAP); Adolescent Health- Rashtriya Kishor Swasthya Karyakram (RKSK)
12. Disaster Management – Containment, Control and Prevention of Epidemics and Pandemics – Acts, Guidelines and Role of Government and Public

Unit III: Hygiene

10 Hrs.

13. Hygiene – Definition; Personal, Community, Medical and Culinary hygiene; WASH (**W**ater, **S**anitation and **H**ygien**e**) programme
14. Rural Community Health: Village health sanitation & Nutritional committee (Roles & Responsibilities); About Accredited Social Health Activist (ASHA); Village Health Nutrition Day, Rogi Kalyan Samitis
15. Community & Personal Hygiene: Environmental Sanitation and Sanitation in Public places
16. Public Awareness through Digital Media - An Introduction to Mobile Apps of Government of India: NHP, Swasth Bharat, No More Tension, Pradhan Mantri Surakshit Mantritva Abhiyan (PM Suman Yojana), My Hospital (Mera aspataal), India fights Dengue, JSK Helpline, Ayushman Bhava, Arogya Setu, Covid 19AP

REFERENCES

- **Bamji, M.S., K. Krishnaswamy & G.N.V. Brahmam (2009)** *Textbook of Human Nutrition(3rd edition)* Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi
- **Swaminathan (1995)** *Food & Nutrition*(Vol I, Second Edition) The Bangalore Printing &Publishing Co Ltd., , Bangalore
- **Vijaya Khader (2000)** *Food, nutrition & health*, Kalyan Publishers, New Delhi
- **Srilakshmi, B., (2010)** *Food Science, (5th Edition)* New Age International Ltd., New Delhi

- Weblinks: <https://nhm.gov.in/>
- National Rural Health Scheme:
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=969&lid=49>
 - National Urban Health Scheme:
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=970&lid=137>
 - Village health sanitation & Nutritional committee
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=149&lid=225>
 - About Accredited Social Health Activist (ASHA)
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226>
 - Village Health Nutrition Day
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=152&lid=228>
 - Rogi Kalyan Samitis
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=153&lid=229>
 - Health Impact Assessment - <https://www.who.int/hia/about/faq/en/>
(suggested information only)
http://www.euro.who.int/data/assets/pdf_file/0011/261929/Health-in-Impact-Assessments-final-version.pdf?ua=1
 - WASH <https://www.unicef.org/wash/> and
https://www.unicef.org/wash/files/UNICEF_Strategy_for_WASH_2016_2030.PDF
 - Healthy Living <https://www.nhp.gov.in/healthylivingViewall>

Note: The above web links are from MoHFW, GoI. Teachers can prepare their notes from other resources also.

BASICS OF NUTRITION

1.0 Nutrition:

- **Definition:** Nutrition is the process by which living organisms take in and use food to maintain life, grow, and function properly. It involves consuming nutrients like proteins, carbohydrates, fats, vitamins, and minerals.

Importance of Nutrition:

- **Energy:** It provides energy for daily activities.
- **Growth and Development:** It is essential for body growth, tissue repair, and the development of organs.
- **Immune System:** It strengthens the immune system, helping the body to fight diseases.
- **Preventing Diseases:** A well-balanced diet helps prevent nutrition-related diseases like obesity, diabetes, and heart problems.
- **Mental Well-being:** Nutrition impacts brain function, influencing mood, memory, and mental health.

Good Nutrition:

- **Definition:** Good nutrition means getting the right amounts of nutrients from a balanced diet. It supports growth, maintains body functions, and provides energy for daily tasks.
- **Sources of Good Nutrition:** Fruits, vegetables, whole grains, lean proteins, and healthy fats contribute to good nutrition.

Malnutrition:

- **Definition:** Malnutrition occurs when a person's diet lacks the proper amount of nutrients, leading to health problems.
- **Types:**
 - **Undernutrition:** Not getting enough nutrients, causing stunted growth, weakened immune system, and energy deficiency.
 - **Overnutrition:** Consuming too many nutrients, often leading to obesity and related health issues.

Balanced Diet:

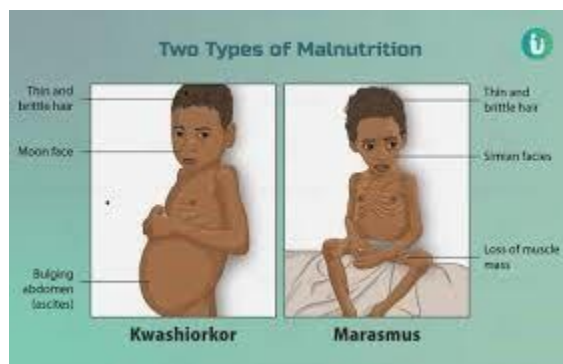
- **Definition:** A balanced diet includes a variety of foods in the right proportions, providing all necessary nutrients in adequate amounts for maintaining health.
- **Key Nutrients in a Balanced Diet:**
 - **Carbohydrates:** Provide energy.
 - **Proteins:** Build and repair body tissues.
 - **Fats:** Essential for energy storage, brain function, and absorbing certain vitamins.
 - **Vitamins and Minerals:** Regulate body processes and protect against illnesses.
 - **Water:** Vital for hydration and maintaining bodily functions.

Basics of Meal Planning:

- **Variety:** Include different food groups (fruits, vegetables, grains, proteins, and dairy) in meals to get a range of nutrients.
- **Portion Control:** Manage portion sizes to prevent overeating or undereating.
- **Nutrient Balance:** Ensure meals contain a good balance of carbohydrates, proteins, fats, vitamins, and minerals.
- **Meal Timing:** Plan meals at regular intervals to maintain energy levels and metabolism.
- **Personal Preferences and Needs:** Consider age, health status, and personal taste when planning meals.

A balanced diet and proper nutrition lead to better health, while malnutrition can cause various health problems. Meal planning helps in achieving good nutrition by ensuring a balanced intake of nutrients.

In other words; **malnutrition** is when the body does not have enough of the required nutrients (*under-nutrition*) or has excess of the required nutrients (*over-nutrition*).





Balanced diet – Indian thalis

1.1 Carbohydrates –functions, dietary sources, effects of deficiency.

Carbohydrates:

Functions:

1. **Primary Source of Energy:** Carbohydrates are the body's main fuel, providing energy for physical activities and daily tasks.
2. **Brain Function:** The brain relies on glucose (a type of carbohydrate) for proper functioning.
3. **Spare Protein:** Carbohydrates prevent the body from breaking down proteins for energy, allowing proteins to be used for muscle building and repair.
4. **Digestive Health:** Fiber, a type of carbohydrate, helps maintain digestive health and prevent constipation.

Dietary Sources:

1. **Grains:** Bread, rice, pasta, oats, and cereals.
2. **Vegetables:** Potatoes, corn, peas, and root vegetables like sweet potatoes.
3. **Fruits:** Bananas, apples, berries, and oranges.
4. **Legumes:** Beans, lentils, and chickpeas.
5. **Dairy Products:** Milk and yogurt (contain lactose, a natural sugar).
6. **Sugars:** Table sugar, honey, and sugary snacks (though these should be limited for health).

Effects of Carbohydrate Deficiency:

1. **Low Energy:** Without enough carbohydrates, the body struggles to produce energy, leading to fatigue and weakness.
2. **Difficulty Concentrating:** Since the brain needs glucose, a lack of carbohydrates can cause poor concentration and memory problems.
3. **Muscle Breakdown:** The body may start breaking down proteins (muscles) for energy, leading to muscle loss.
4. **Digestive Issues:** A lack of fiber can cause constipation and other digestive problems.
5. **Hypoglycemia (Low Blood Sugar):** Insufficient carbohydrates can lead to low blood sugar levels, causing dizziness, irritability, and shakiness.



Types of Carbohydrates

Carbohydrates

Simple

Complex

Sugars

Starches

Fibers

Fruits
Vegetables
Dairy

Grains
Root Vegetables
Legumes

Fruits
Vegetables
Grains
Legumes



GOOD CARBS

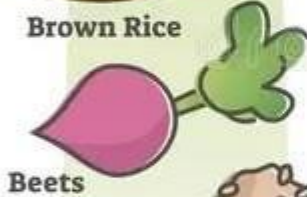
Non-Starchy Vegetables



Fruits



Brown Rice



Beets



Oats



Sweet Potatoes



Pumpkin and Squash



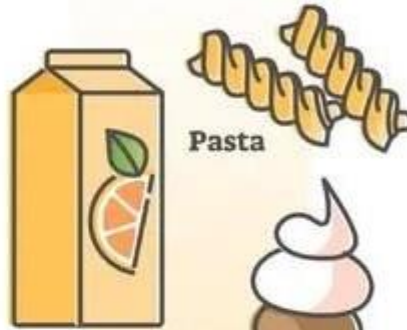
Beans and Lentils



Quinoa



Donuts and Baked Goods



Pasteurized Fruit Juices



Pasta



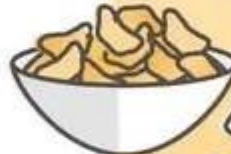
Ice Cream



Candy



Potato Chips



Cereal



Refined Sugar



White Bread

BAD CARBS

1.3 Lipids –functions, dietary sources, effects of deficiency.

Lipids (Fats):

Functions:

1. **Energy Storage:** Lipids are a concentrated source of energy. They provide more energy than carbohydrates and proteins and store excess energy for later use.
2. **Insulation and Protection:** Fats help insulate the body and protect vital organs like the heart, liver, and kidneys from physical damage.
3. **Cell Structure:** Lipids are essential components of cell membranes, helping maintain the structure and function of cells.
4. **Absorption of Vitamins:** Lipids help the body absorb fat-soluble vitamins (A, D, E, K) from food.
5. **Hormone Production:** Fats are necessary for producing hormones that regulate bodily functions.

Dietary Sources:

1. **Healthy Fats:**
 - **Unsaturated Fats:**
 - **Monounsaturated Fats:** Olive oil, avocados, and nuts (like almonds and cashews).
 - **Polyunsaturated Fats:** Fatty fish (like salmon and mackerel), flaxseeds, walnuts, and sunflower oil.
 - **Omega-3 and Omega-6 Fatty Acids:** Found in fish, flaxseeds, and vegetable oils.
2. **Unhealthy Fats:**
 - **Saturated Fats:** Found in butter, red meat, cheese, and coconut oil (should be eaten in moderation).
 - **Trans Fats:** Found in processed foods like fried snacks, baked goods, and margarine (should be avoided as much as possible).

Effects of Deficiency:

1. **Low Energy Levels:** Without enough fats, the body may have trouble storing energy, leading to fatigue.
2. **Vitamin Deficiency:** A lack of fats can prevent the body from absorbing fat-soluble vitamins (A, D, E, and K), leading to deficiencies and related health problems.
3. **Poor Skin Health:** Fats are essential for maintaining healthy skin. A deficiency can cause dry, flaky skin and slow wound healing.
4. **Hormonal Imbalances:** Since fats are necessary for hormone production, a deficiency can affect hormone levels, leading to issues like poor growth, reproductive problems, and mood swings.
5. **Weakened Immune System:** Without enough lipids, the body may struggle to produce essential hormones and cell membranes, weakening the immune response.

Lipids are vital for energy, cell structure, and absorbing essential vitamins. It's important to include healthy fats, like those from fish, nuts, and olive oil, in your diet while limiting unhealthy fats, like trans fats and too much saturated fat.



GOOD FATS

Use these...

Avocados
Eggs
Coconut Oil
Raw Nuts
Olive Oil
Salmon
Flaxseed
Leafy Green Veg
Organic Butter
Organic Nut Oils

BAD FATS

Lose these...

Margarine
French Fries
Doughnuts
Cookies
Pastries
Crackers
Processed Meats
Canola Oil
Hydrogenated Oils

1.4 Proteins –functions, dietary sources, effects of deficiency.

Proteins:

Functions:

1. **Building and Repairing Tissues:** Proteins are essential for the growth and repair of tissues, including muscles, skin, and organs.
2. **Enzymes and Hormones:** Proteins are needed to produce enzymes that speed up chemical reactions in the body and hormones that regulate various body processes.
3. **Immune Function:** Proteins help create antibodies, which protect the body from infections and diseases.
4. **Transport and Storage:** Proteins transport molecules like oxygen (through hemoglobin) and store important nutrients in the body.
5. **Energy Source:** Although not the primary energy source, proteins can be used for energy when carbohydrates and fats are not available.

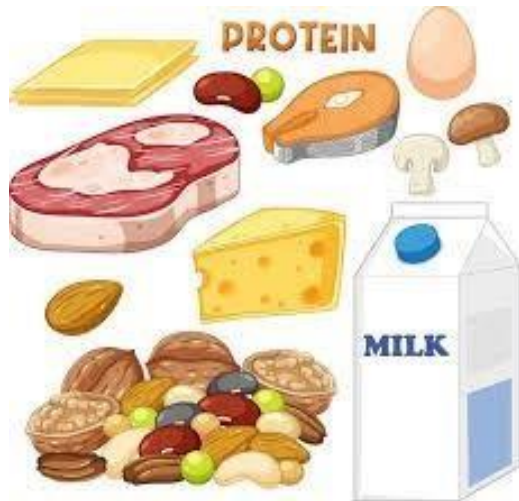
Dietary Sources:

1. **Animal Sources** (complete proteins, providing all essential amino acids):
 - Meat: Chicken, beef, pork, and lamb.
 - Fish: Salmon, tuna, and mackerel.
 - Dairy: Milk, cheese, and yogurt.
 - Eggs.
2. **Plant Sources** (some are incomplete, but can be combined to get all amino acids):
 - Legumes: Beans, lentils, chickpeas, and peas.
 - Nuts and Seeds: Almonds, peanuts, sunflower seeds, and chia seeds.
 - Whole Grains: Quinoa, brown rice, and oats.
 - Soy Products: Tofu, tempeh, and soy milk.

Effects of Deficiency:

1. **Muscle Loss:** Without enough protein, the body begins to break down muscle tissue to meet its protein needs.
2. **Slow Growth:** Protein is essential for growth, especially in children. A deficiency can lead to stunted growth.
3. **Weakened Immune System:** Protein is needed to make antibodies, so a lack of it can weaken the immune system and increase the risk of infections.
4. **Hair, Skin, and Nail Problems:** Deficiency can cause brittle hair, flaky skin, and weak nails since protein is vital for maintaining these tissues.
5. **Edema (Swelling):** Severe protein deficiency can cause fluid to accumulate in the body, leading to swelling, especially in the legs and feet.

Protein is crucial for growth, repair, and overall body function. A balanced diet that includes both animal and plant protein sources can help meet your body's protein needs.



1.5 Brief account of Vitamins- functions, food sources, effects of deficiency.

Vitamins:

Vitamins are essential nutrients the body needs in small amounts to function properly. They play a key role in maintaining overall health, supporting the immune system, and ensuring the normal functioning of cells and organs.

Types of Vitamins:

1. **Fat-Soluble Vitamins:** These vitamins are stored in the body's fat and include vitamins A, D, E, and K.
2. **Water-Soluble Vitamins:** These vitamins are not stored in the body and need to be replenished regularly. They include the B-complex vitamins and vitamin C.

Functions, Food Sources, and Effects of Deficiency:

1. Vitamin A:

- **Functions:**
 - Supports good vision, especially in low light.
 - Promotes healthy skin and immune function.
- **Food Sources:** Carrots, sweet potatoes, spinach, liver, eggs, and dairy products.
- **Effects of Deficiency:**
 - Night blindness.

- Dry skin and eyes.
- Increased risk of infections.

Vitamin B-Complex (B1, B2, B3, B6, B9, B12):

Helps in energy production.

Supports brain function and red blood cell formation.

Essential for nerve function.

Food Sources: Whole grains, meat, fish, eggs, dairy, legumes, and leafy greens.

Effects of Deficiency:

Fatigue, weakness.

Anemia (low red blood cells).

Nerve damage and confusion (especially for B12).

Birth defects (for folic acid, or B9).

Vitamin C:

Boosts the immune system.

Helps in collagen production for skin, blood vessels, and bones.

Acts as an antioxidant.

Food Sources: Citrus fruits (oranges, lemons), strawberries, bell peppers, broccoli, and tomatoes.

Effects of Deficiency:

Scurvy (bleeding gums, weakness, joint pain).

Slow wound healing.

Frequent infections.

Vitamin D:

Promotes the absorption of calcium for healthy bones and teeth.

Supports immune function.

Food Sources: Sunlight, fortified dairy products, fatty fish (salmon, mackerel), and egg yolks.

Effects of Deficiency:

Rickets (soft, weak bones in children).

Osteomalacia (bone pain and weakness in adults).

Increased risk of fractures.

2. Vitamin E:

• Functions:

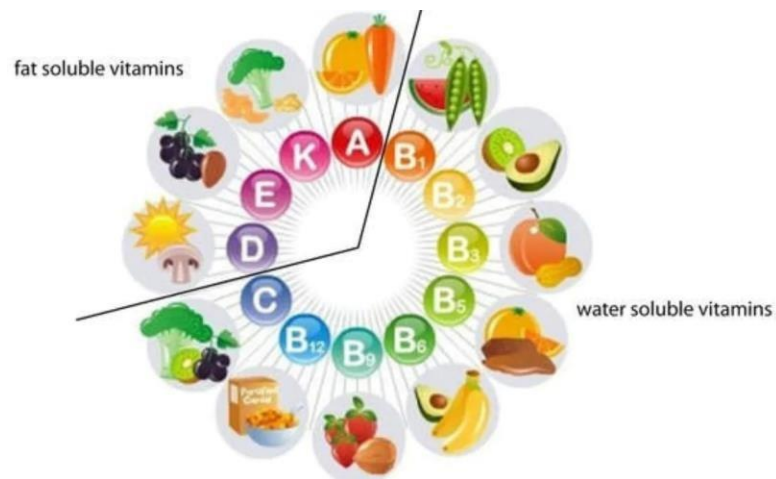
- Acts as an antioxidant, protecting cells from damage.

- Supports skin health and immune function.

- **Food Sources:** Nuts, seeds, spinach, broccoli, and vegetable oils.
- **Effects of Deficiency:**
 - Muscle weakness.
 - Nerve damage.
 - Vision problems.

3. Vitamin K:

- **Functions:**
 - Helps in blood clotting to prevent excessive bleeding.
 - Supports bone health.
- **Food Sources:** Leafy green vegetables (spinach, kale), broccoli, and dairy products.
- **Effects of Deficiency:**
 - Excessive bleeding or bruising.
 - Poor bone health and increased risk of fractures.



1.6 Macro and micro minerals –functions, effects of deficiency; food sources of Calcium, Potassium and Sodium; food sources of Iron, Iodine and Zinc.

Minerals:

Minerals are essential nutrients that our body needs in varying amounts to function properly. They are divided into two categories:

1. **Macrominerals (Major Minerals):** Needed in larger amounts.
2. **Microminerals (Trace Minerals):** Needed in smaller amounts.

Functions of Minerals:

Macrominerals:

Calcium:

Builds and maintains strong bones and teeth.

Supports muscle function and nerve transmission.

Food Sources: Dairy products (milk, cheese, yogurt), leafy greens (spinach, kale), tofu, almonds.

Effects of Deficiency:

Osteoporosis (weak bones).

Muscle cramps and spasms.

Weak teeth.

Potassium:

Regulates fluid balance and blood pressure.

Supports muscle contractions and heart function.

Food Sources: Bananas, oranges, potatoes, tomatoes, spinach, beans.

Effects of Deficiency:

Muscle weakness.

Cramps and fatigue.

Irregular heartbeat (arrhythmia).

Sodium:

Helps regulate fluid balance.

Aids in nerve signaling and muscle contractions.

Food Sources: Table salt, processed foods, bread, canned soups.

Effects of Deficiency:

Low blood pressure.

Muscle cramps.

Dizziness and nausea.

Microminerals:

Iron:

Helps produce hemoglobin in red blood cells that carries oxygen throughout the body.

Food Sources: Red meat, poultry, beans, lentils, spinach, fortified cereals.

Effects of Deficiency:

Anemia (fatigue, weakness, pale skin).

Reduced immunity.

Difficulty concentrating.

Iodine:

Supports thyroid function, which regulates metabolism and energy levels.

Food Sources: Iodized salt, seafood, dairy products, seaweed.

Effects of Deficiency:

Goiter (swelling of the thyroid gland).

Weight gain and fatigue.

Developmental issues in children.

Zinc:

Supports the immune system.

Helps with wound healing and cell growth.

Food Sources: Meat, shellfish, seeds, nuts, dairy, whole grains.

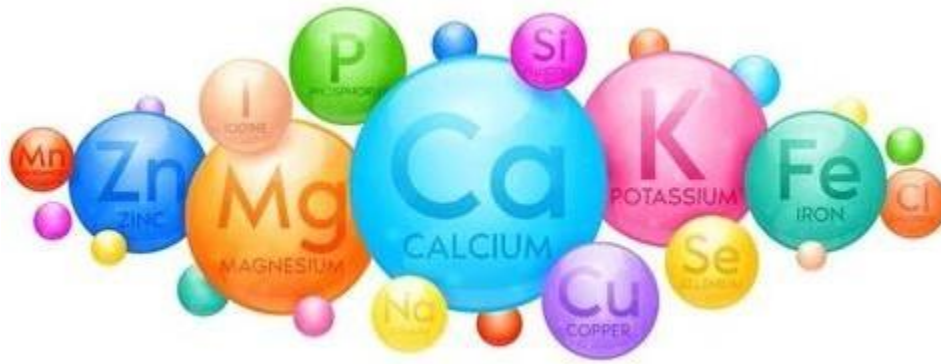
Effects of Deficiency:

Slow wound healing.

Weak immune system, leading to frequent infections.

Hair loss and skin problems.

Major (Macro) Minerals	Trace (Micro) Minerals
Calcium	Copper
Phosphorus	Manganese
Magnesium	Zinc
Potassium	Selenium
Sulphur	Cobalt
Sodium	Iodine
Chlorine	



1.7 Importance of water– functions, sources, requirement and effects of deficiency.

Importance of Water:

Water is essential for life and plays a crucial role in the body's overall health and functioning. It makes up a large part of our body (about 60%) and is vital for many processes.

Functions of Water:

1. **Regulates Body Temperature:** Water helps maintain a stable body temperature through sweating and breathing.
2. **Aids Digestion:** Water helps break down food, absorb nutrients, and prevent constipation.
3. **Transports Nutrients and Oxygen:** Water carries nutrients and oxygen to cells and removes waste products from the body.
4. **Lubricates Joints:** Water acts as a lubricant for joints, helping them move smoothly.
5. **Protects Organs and Tissues:** Water cushions organs and tissues, protecting them from damage.
6. **Maintains Fluid Balance:** Water helps balance body fluids and supports kidney function by flushing out toxins.

Sources of Water:

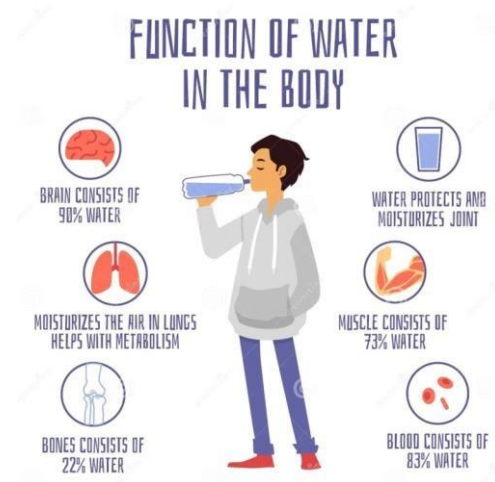
1. **Drinking Water:** Plain water is the best source of hydration.
2. **Beverages:** Milk, fruit juices, tea, and coffee also contribute to water intake (though some contain caffeine, which can dehydrate if consumed in excess).
3. **Fruits and Vegetables:** Many fruits and vegetables have high water content, such as cucumbers, watermelon, oranges, and tomatoes.
4. **Soups and Broths:** Liquid-based foods like soups provide additional hydration.

Water Requirement:

- The amount of water needed varies depending on age, gender, climate, and physical activity.
- **General Guideline:**
 - Adults should aim for about **8 glasses (2 liters)** of water per day.
 - More water may be needed during hot weather or after physical activity to replace lost fluids.

Effects of Water Deficiency (Dehydration):

1. **Mild Dehydration:**
 - Thirst and dry mouth.
 - Fatigue and dizziness.
 - Dark yellow urine and less frequent urination.
2. **Moderate to Severe Dehydration:**
 - Headaches and confusion.
 - Rapid heartbeat and breathing.
 - Dry skin and sunken eyes.
 - In severe cases, it can lead to heatstroke, kidney damage, or even death.



MCQ

1. What is the primary definition of nutrition?

- A) The process of consuming and utilizing food for growth and maintenance
- B) The study of vitamins and minerals only
- C) The process of making food taste better
- D) The study of food storage techniques

Answer: A

2. Why is nutrition important for human health?

- A) It helps in the aesthetic appearance only
- B) It is crucial for maintaining optimal health, energy, and body function
- C) It is necessary for learning how to cook
- D) It has no impact on health

Answer: B

3. What constitutes a balanced diet?

- A) High amounts of carbohydrates and low amounts of protein
- B) An appropriate mix of carbohydrates, proteins, fats, vitamins, and minerals

- C) Only fruits and vegetables
- D) High amounts of fats and sugars

Answer: B

4. Which of the following is NOT a basic principle of meal planning?

- A) Including a variety of foods from all food groups
- B) Eating large portions of one type of food
- C) Balancing calorie intake with physical activity
- D) Ensuring meals are nutritionally adequate

Answer: B

5. What is one of the primary functions of carbohydrates?

- A) Providing long-term energy storage
- B) Building muscle tissue
- C) Aiding in the absorption of fats
- D) Providing immediate energy

Answer: D

6. Which of the following is a dietary source of carbohydrates?

- A) Meat
- B) Milk
- C) Rice
- D) Olive oil

Answer: C

7. What is a common effect of carbohydrate deficiency?

- A) Weight gain
- B) Constipation
- C) Fatigue and weakness
- D) Excessive thirst

Answer: C

8. What function do lipids serve in the body?

- A) Providing immediate energy
- B) Assisting in hormone production and energy storage
- C) Aiding in digestion of carbohydrates
- D) Enhancing protein synthesis

Answer: B

9. Which of the following is a dietary source of lipids?

- A) Apples
- B) Chicken breast
- C) Butter
- D) Carrots

Answer: C

10. What can result from a deficiency in lipids?

- A) Increased cholesterol levels
- B) Skin issues such as dryness
- C) Enhanced cognitive function
- D) Improved immune response

Answer: B

11. What is the main function of proteins in the body?

- A) Providing quick energy
- B) Building and repairing tissues
- C) Enhancing vision
- D) Regulating body temperature

Answer: B

12. Which food is a good source of protein?

- A) Rice
- B) Beef
- C) Grapes
- D) Olive oil

Answer: B

13. What might be a result of protein deficiency?

- A) Improved muscle mass
- B) Edema and weakened immunity
- C) Increased stamina
- D) Enhanced skin elasticity

Answer: B

14. Which vitamin is primarily involved in vision?

- A) Vitamin A
- B) Vitamin C
- C) Vitamin D
- D) Vitamin K

Answer: A

15. A deficiency in which vitamin can lead to scurvy?

- A) Vitamin B12
- B) Vitamin C
- C) Vitamin D
- D) Vitamin E

Answer: B

16. Which of the following foods is a good source of Vitamin D?

- A) Oranges
- B) Spinach

- C) Salmon
- D) Whole grains

Answer: C

17. What is a primary function of calcium in the body?

- A) Regulating blood pressure
- B) Building and maintaining strong bones and teeth
- C) Aiding in carbohydrate digestion
- D) Enhancing vitamin absorption

Answer: B

18. Which mineral is crucial for thyroid hormone production?

- A) Calcium
- B) Potassium
- C) Iron
- D) Iodine

Answer: D

19. A deficiency in which mineral can lead to anemia?

- A) Zinc
- B) Calcium
- C) Iron
- D) Sodium

Answer: C

20. What is a major source of potassium in the diet?

- A) Bread
- B) Bananas
- C) Cheese
- D) Beef

Answer: B

HEALTH AND HYGIENE UNIT -2

2.1 Notes on Health - Determinants of health, Key Health Indicators, Environment health & Public health; Health-Education: Principles and Strategies

Health:

Health is a state of complete physical, mental, and social well-being, not just the absence of disease or illness.

Determinants of Health:

Determinants of health are factors that influence an individual's health status. They include:

1. **Biological Factors:**
 - Genetics, age, gender.
 - Inherited conditions or predispositions to certain diseases.
2. **Lifestyle Choices:**
 - Diet, physical activity, sleep, smoking, alcohol, and drug use.
 - Positive choices improve health; negative ones increase the risk of diseases.
3. **Social and Economic Factors:**
 - Education, income, employment, and social support networks.
 - People with higher education and income tend to have better health.
4. **Environment:**
 - Clean air, water, safe housing, and access to healthcare.
 - Living in polluted or unsafe environments increases health risks.
5. **Healthcare Access:**
 - Availability of medical care, vaccinations, and health services.
 - Timely access to healthcare can prevent or treat illnesses early.

Key Health Indicators:

Health indicators are measures that help assess the health of individuals or populations. Some key indicators include:

1. **Life Expectancy:** The average number of years a person is expected to live.
2. **Infant Mortality Rate:** The number of infant deaths per 1,000 live births.
3. **Maternal Mortality Rate:** The number of deaths of women during childbirth per 100,000 live births.
4. **Morbidity and Mortality:** The prevalence of diseases and the death rates in a population.
5. **Nutritional Status:** Indicators like body mass index (BMI) or rates of malnutrition.
6. **Access to Clean Water and Sanitation:** The percentage of people with access to clean drinking water and proper sanitation.

Environmental Health:

Environmental health focuses on the interaction between people and their environment and how this affects their well-being.

- **Importance:** A healthy environment, including clean air, water, and safe living conditions, reduces the risk of diseases.
- **Issues in Environmental Health:**
 - **Air Pollution:** Causes respiratory problems like asthma.
 - **Water Pollution:** Leads to waterborne diseases like cholera.
 - **Waste Management:** Poor waste disposal can spread infections.
 - **Climate Change:** Contributes to heatwaves, storms, and diseases like malaria.

Public Health:

Public health refers to efforts made to protect and improve the health of populations through education, policies, and health programs.

- **Key Areas of Public Health:**
 - **Preventive Care:** Vaccinations, health screenings, and promoting healthy behaviors.
 - **Health Promotion:** Educating communities on healthy lifestyles.
 - **Disease Control:** Monitoring and controlling the spread of infectious diseases.
 - **Policy Advocacy:** Creating policies for better health infrastructure, clean environments, and access to care.

Health Education:

Principles of Health Education:

1. **Relevance:** Health education should be relevant to people's needs and concerns.
2. **Simplicity:** The information should be easy to understand and practical.
3. **Participation:** Engage individuals and communities in learning about health and making informed decisions.
4. **Feedback:** Regularly assess and improve health education strategies based on feedback.
5. **Sustainability:** Education efforts should aim to create long-lasting health habits.

Strategies of Health Education:

1. **Community-Based Programs:** Organize workshops, health camps, and talks in communities to promote healthy behaviors.
2. **School Health Education:** Teach children and teenagers about nutrition, hygiene, and preventive healthcare.
3. **Media Campaigns:** Use radio, TV, and social media to spread health messages widely.
4. **Health Promotion Materials:** Distribute pamphlets, posters, and videos with simple health tips.

5. **Personalized Counseling:** One-on-one sessions with health professionals to address specific health concerns.
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2.2 Notes on Health Policy & Health Organizations: Health Indicators and National Health Policy of Govt. of India-2017; Functioning of various nutrition and health organizations in India viz., NIN (National Institution of Nutrition), FNB (Food and Nutrition Board), ICMR (Indian Council of Medical Research), IDA (Indian Dietetics Association), WHO-India, UNICEF.

Health Policy & Health Organizations

Health Indicators:

Health indicators are important tools used to measure the health status of a population. Common health indicators include:

1. **Life Expectancy:** Average number of years a person is expected to live.
2. **Infant Mortality Rate:** Number of infant deaths per 1,000 live births.
3. **Maternal Mortality Rate:** Number of deaths of mothers during childbirth per 100,000 live births.
4. **Malnutrition Rates:** Percentage of children or adults suffering from undernutrition or overnutrition.
5. **Disease Prevalence:** Rate of specific diseases in a population, such as diabetes, hypertension, or infectious diseases.
6. **Healthcare Access:** The proportion of people who have access to essential healthcare services.

National Health Policy of India - 2017:

The **National Health Policy (NHP) 2017** was introduced by the Government of India to improve healthcare across the country. Some key points include:

1. **Health for All:** Ensure universal access to quality health care, especially for the poor and vulnerable.
2. **Focus on Preventive Care:** Promote preventive health measures, such as vaccinations, hygiene, and lifestyle changes to reduce disease burden.
3. **Affordable Healthcare:** Make healthcare services affordable by reducing out-of-pocket expenses for medical treatments.
4. **Strengthening Primary Healthcare:** Improve primary healthcare services, especially in rural areas, to provide early diagnosis and treatment.

5. **Public-Private Partnerships:** Encourage collaboration between the government and private sector to improve healthcare infrastructure and services.
6. **Tackling Non-Communicable Diseases:** Focus on controlling diseases like diabetes, heart disease, and cancer through awareness programs, screenings, and lifestyle interventions.

Health and Nutrition Organizations in India:

1. **National Institute of Nutrition (NIN):**
 - **Function:** NIN is a premier research organization under the Indian Council of Medical Research (ICMR) that focuses on nutrition science. It conducts research on nutritional requirements, diet planning, and malnutrition.
 - **Role:** Provides guidelines for healthy eating and nutrition, develops nutritional policies, and conducts surveys to assess the nutritional status of the population.
2. **Food and Nutrition Board (FNB):**
 - **Function:** FNB is under the Ministry of Women and Child Development and works to improve the nutrition of vulnerable groups, such as women and children, through various nutrition programs.
 - **Role:** Promotes nutrition education, implements the Integrated Child Development Services (ICDS) program, and organizes community-level training on balanced diets.
3. **Indian Council of Medical Research (ICMR):**
 - **Function:** ICMR is the apex body for biomedical research in India. It supports scientific studies and innovations in healthcare, including the areas of nutrition, communicable and non-communicable diseases, and public health.
 - **Role:** Provides scientific evidence for health policies, conducts disease surveillance, and supports new treatments and medical technologies.
4. **Indian Dietetics Association (IDA):**
 - **Function:** IDA is a professional organization for dietitians and nutritionists in India. It promotes research in dietetics, offers professional training, and provides guidelines for clinical nutrition.
 - **Role:** Educates the public on healthy eating practices and the role of diet in preventing and managing diseases.
5. **World Health Organization (WHO) - India:**
 - **Function:** WHO-India works with the Government of India to improve public health outcomes through policy development, disease prevention, and health education.
 - **Role:** Supports vaccination campaigns, monitors disease outbreaks, and advises on healthcare strategies. It also promotes health standards and coordinates international health initiatives in India.
6. **United Nations International Children's Emergency Fund (UNICEF) - India:**
 - **Function:** UNICEF-India focuses on improving the health and well-being of children and mothers. It works on issues like child nutrition, immunization, sanitation, and education.

- **Role:** Implements programs to reduce child mortality, malnutrition, and improve access to clean water and healthcare services for women and children in rural and underprivileged areas.

2.3 Notes on National Health Mission: National Rural Health Mission (NRHM) Framework, National Urban Health Mission (NUHM) Framework in India

National Health Mission (NHM):

The **National Health Mission (NHM)** was launched by the Government of India in 2013. It aims to provide accessible, affordable, and quality healthcare services to all, particularly focusing on rural and urban poor populations. NHM includes two major components: **National Rural Health Mission (NRHM)** and **National Urban Health Mission (NUHM)**.

1. National Rural Health Mission (NRHM) Framework:

Launched in: 2005.

Goal: Improve healthcare delivery in rural areas, especially for underserved and vulnerable populations like women, children, and the elderly.

Key Features of NRHM:

- 1. Strengthening Primary Healthcare:**
 - **Sub-Centers, Primary Health Centers (PHCs), and Community Health Centers (CHCs)** are improved to provide better infrastructure, medical staff, and equipment.
 - Focus on providing essential maternal, child health, and immunization services.
- 2. Accredited Social Health Activist (ASHA):**
 - ASHAs are community health workers appointed to connect rural populations with healthcare services.
 - They provide basic healthcare, promote hygiene, facilitate immunizations, and encourage institutional deliveries (births in hospitals).
- 3. Janani Suraksha Yojana (JSY):**
 - A scheme under NRHM to promote safe motherhood by offering cash incentives to encourage pregnant women to deliver in hospitals or health centers.
- 4. Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A):**
 - Focuses on improving the health of women and children through family planning, safe delivery, nutrition programs, and immunizations.
- 5. National Disease Control Programs:**
 - NRHM integrates programs to control communicable diseases like tuberculosis (TB), malaria, leprosy, and HIV/AIDS in rural areas.
- 6. Infrastructure Development:**

- Emphasis on upgrading healthcare facilities in rural areas by constructing new health centers, providing ambulance services, and ensuring the availability of medicines and diagnostics.

Impact:

NRHM has improved healthcare accessibility in rural India by focusing on maternal and child health, reducing mortality rates, and increasing immunization coverage.

2. National Urban Health Mission (NUHM) Framework:

Launched in: 2013.

Goal: Provide equitable healthcare services to the urban poor, including slum dwellers and other vulnerable urban populations.

Key Features of NUHM:

- 1. Targeting Urban Poor:**
 - NUHM focuses on people living in urban slums, street children, migrant workers, and informal workers who lack access to basic health services.
 - The mission aims to address the challenges posed by rapid urbanization, such as overcrowded slums, poor sanitation, and limited healthcare infrastructure.
- 2. Urban Primary Health Centers (UPHCs):**
 - Establishes **Urban Primary Health Centers** that provide essential outpatient care, immunizations, maternal and child health services, and health education in urban areas.
 - Focus on preventive and promotive healthcare for the urban population.
- 3. Outreach and Community Participation:**
 - Similar to the ASHAs in rural areas, NUHM deploys **Urban ASHAs** to connect urban populations with health services.
 - **Mahila Arogya Samitis (MAS)** are community groups formed to spread health awareness and involve the community in health initiatives.
- 4. Convergence with Other Urban Programs:**
 - NUHM works alongside urban development programs to improve sanitation, clean drinking water, and housing to address the broader determinants of health in urban areas.
- 5. Focus on Non-Communicable Diseases (NCDs):**
 - With the rise of diseases like diabetes, hypertension, and heart disease in urban populations, NUHM focuses on early detection and management of non-communicable diseases through screenings and health camps.
- 6. Healthcare Financing:**
 - The government provides funding to strengthen the health infrastructure in urban areas, including building health centers, training health workers, and providing medicines and diagnostic services.

Impact:

NUHM has improved access to primary healthcare for the urban poor, promoted preventive care, and integrated healthcare with urban development to address health inequities in cities.

2.4 Notes on Women & Child Health Care Schemes: Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+); Janani Shishu Suraksha Karyakaram (JSSK); Rashtriya Bal Swasthya Karyakram(RBSK); India Newborn Action Plan (INAP); Adolescent Health- Rashtriya Kishor Swasthya Karyakram (RKSK) in India

Women & Child Health Care Schemes in India

India has several health care schemes specifically aimed at improving the health and well-being of women and children. These schemes focus on various aspects of maternal, newborn, child, and adolescent health.

1. Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+)

Goal: To provide comprehensive health services to improve the health outcomes for women, newborns, children, and adolescents.

Key Components:

- 1. Reproductive Health:**
 - **Family Planning:** Provides access to contraceptives and family planning services to control fertility and prevent unintended pregnancies.
 - **Prenatal and Postnatal Care:** Ensures regular check-ups and care during pregnancy and after childbirth.
- 2. Maternal Health:**
 - **Safe Deliveries:** Promotes institutional deliveries and provides care to prevent complications during childbirth.
 - **Maternal Nutrition:** Focuses on improving nutrition for pregnant and lactating women to ensure healthy outcomes.
- 3. Newborn Health:**
 - **Newborn Screening:** Early identification and management of congenital conditions and infections.
 - **Immunizations:** Ensures newborns receive necessary vaccines to prevent diseases.
- 4. Child Health:**
 - **Growth Monitoring:** Regular monitoring of child growth and development to detect and address malnutrition.

- **Child Immunization:** Provides vaccines to prevent common childhood diseases.
- 5. **Adolescent Health:**
 - **Sexual and Reproductive Health Education:** Offers education and services related to sexual health and adolescence.

2. Janani Shishu Suraksha Karyakaram (JSSK)

Goal: To eliminate out-of-pocket expenses for pregnant women and newborns in government hospitals.

Key Features:

1. **Free Services:**
 - **Free Delivery Services:** Covers all costs related to deliveries, including cesarean sections.
 - **Free Newborn Care:** Provides free healthcare for newborns, including essential medicines and diagnostics.
2. **Transport and Referral Services:**
 - **Transport:** Provides free transportation for pregnant women to and from healthcare facilities.
 - **Referral:** Ensures timely referral to higher-level healthcare facilities if needed.
3. **Additional Benefits:**
 - **Cash Assistance:** Provides financial support to cover incidental expenses for women during and after delivery.
 - **Free Medicines and Diagnostics:** Covers the cost of medicines and diagnostic tests for both mothers and newborns.

3. Rashtriya Bal Swasthya Karyakram (RBSK)

Goal: To provide comprehensive healthcare services for children from birth to 18 years, focusing on early detection and management of health conditions.

Key Features:

1. **Health Screening:**
 - **Regular Check-Ups:** Periodic health screenings to detect diseases and developmental disorders early.
 - **Health Camps:** Organizes health camps in schools and communities for children.
2. **Treatment and Follow-Up:**
 - **Free Treatment:** Provides free treatment for identified health issues and conditions.
 - **Referral Services:** Refers children to specialized care if needed.
3. **Community Engagement:**

- **Awareness Campaigns:** Educates parents and communities about child health and preventive care.

4. India Newborn Action Plan (INAP)

Goal: To reduce neonatal mortality rates by ensuring high-quality care for newborns.

Key Features:

1. **Essential Newborn Care:**
 - **Immediate Care:** Ensures immediate care and resuscitation for newborns at birth.
 - **Thermal Protection:** Provides warmth and protection against hypothermia.
2. **Improving Facilities:**
 - **Neonatal Intensive Care Units (NICUs):** Enhances the capacity of NICUs to handle complex cases.
 - **Skilled Birth Attendants:** Trains healthcare providers in essential newborn care practices.
3. **Community-Based Interventions:**
 - **Home-Based Newborn Care:** Encourages practices to improve newborn health at the community level.
 - **Breastfeeding Promotion:** Promotes exclusive breastfeeding for the first six months.

5. Rashtriya Kishor Swasthya Karyakram (RKSK)

Goal: To improve the health and development of adolescents through comprehensive health services and education.

Key Features:

1. **Adolescent Health Services:**
 - **Sexual and Reproductive Health:** Provides education and services related to sexual and reproductive health.
 - **Mental Health:** Addresses mental health issues among adolescents through counseling and support.
2. **Education and Awareness:**
 - **Health Education:** Offers educational programs on health issues, hygiene, and lifestyle choices.
 - **Skill Development:** Focuses on developing skills for better health and well-being.
3. **Community Engagement:**
 - **Peer Education:** Uses peer educators to deliver health messages and support to adolescents.
 - **Support Networks:** Establishes support systems in schools and communities

2.5 Notes on Disaster Management – Containment, Control and Prevention of Epidemics and Pandemics – Acts, Guidelines and Role of Government and Public in India

Disaster Management: Containment, Control, and Prevention of Epidemics and Pandemics in India

Disaster management for epidemics and pandemics involves a coordinated approach to prevent, control, and mitigate the impact of outbreaks. In India, this process is guided by various acts, guidelines, and roles of both government and the public.

1. Acts and Guidelines

1.1 Disaster Management Act, 2005

- **Purpose:** Provides a legal framework for disaster management in India, including preparedness, response, recovery, and mitigation.
- **Key Provisions:**
 - **National Disaster Management Authority (NDMA):** Responsible for formulating policies and plans for disaster management.
 - **State Disaster Management Authorities (SDMAs):** Implement policies at the state level.
 - **District Disaster Management Authorities (DDMAs):** Coordinate disaster management activities at the district level.

1.2 Epidemic Diseases Act, 1897

- **Purpose:** Allows the government to take special measures and prescribe regulations to control the spread of epidemic diseases.
- **Key Provisions:**
 - **Power to Implement Quarantines:** Authorities can enforce quarantine measures and isolation protocols.
 - **Regulation of Public Health Measures:** Measures to control the spread of infectious diseases, such as vaccination and health advisories.

1.3 National Health Policy

- **Purpose:** Guides overall health strategies, including preparedness and response to health emergencies.
- **Key Provisions:**

- **Focus on Health Infrastructure:** Strengthening health systems to respond to health emergencies.
 - **Coordination:** Encourages collaboration between different levels of government and health agencies.
-

2. Role of Government

2.1 National Disaster Management Authority (NDMA)

- **Responsibilities:**
 - Formulates policies and plans for disaster management.
 - Coordinates with various stakeholders to implement disaster management strategies.

2.2 Ministry of Health and Family Welfare

- **Responsibilities:**
 - **Control and Prevention:** Develops guidelines for controlling and preventing epidemics and pandemics.
 - **Health Surveillance:** Monitors disease trends and outbreaks.
 - **Public Health Campaigns:** Conducts awareness campaigns and provides information on health risks and prevention.

2.3 State and District Authorities

- **Responsibilities:**
 - **Implementation:** Implement national policies and guidelines at the state and district levels.
 - **Emergency Response:** Coordinate emergency response efforts, including setting up isolation centers and providing medical care.
 - **Local Coordination:** Work with local bodies and communities to manage health emergencies effectively.

2.4 National Center for Disease Control (NCDC)

- **Responsibilities:**
 - **Surveillance:** Monitors and tracks disease outbreaks across the country.
 - **Guidance:** Provides technical guidance on disease control measures and response strategies.

3. Role of the Public

3.1 Individual Responsibility

- **Hygiene Practices:** Follow good hygiene practices, such as regular handwashing and wearing masks.
- **Vaccination:** Get vaccinated as per recommended schedules to prevent infectious diseases.
- **Seeking Medical Help:** Seek timely medical care and report symptoms of illness to healthcare providers.

3.2 Community Engagement

- **Awareness:** Participate in community health programs and awareness campaigns.
- **Support:** Support public health measures, such as social distancing and isolation during outbreaks.
- **Volunteering:** Engage in volunteer activities to support health services and disaster relief efforts.

3.3 Cooperation with Authorities

- **Adherence to Guidelines:** Follow guidelines issued by health authorities and government officials.
- **Reporting:** Report any suspected cases of disease and assist in contact tracing efforts.

4. Containment, Control, and Prevention Strategies

4.1 Containment

- **Isolation and Quarantine:** Isolate affected individuals and quarantine those who have been exposed to prevent further spread.
- **Travel Restrictions:** Implement travel bans or restrictions to limit the movement of people during outbreaks.

4.2 Control

- **Health Monitoring:** Monitor and track the spread of diseases through surveillance systems.
- **Medical Interventions:** Provide medical treatment, including antiviral medications and vaccines.
- **Public Health Measures:** Implement measures such as contact tracing, testing, and reporting.

4.3 Prevention

- **Vaccination Campaigns:** Conduct vaccination drives to prevent the spread of infectious diseases.
- **Public Education:** Educate the public about preventive measures and health practices.
- **Infrastructure Development:** Strengthen healthcare infrastructure to manage and respond to outbreaks effectively.

HEALTH & HYGEINE UNIT 2

MCQ

1. Which of the following is considered a determinant of health?

- A) Diet
- B) Climate
- C) Income
- D) All of the above

Answer: D

2. What role does education play as a determinant of health?

- A) It has no impact on health
- B) It improves access to health services and knowledge about healthy behaviors
- C) It only affects economic status
- D) It increases the risk of chronic diseases

Answer: B

3. What is a common indicator used to measure population health?

- A) Body Mass Index (BMI)
- B) Literacy rate
- C) Life expectancy
- D) GDP

Answer: C

4. Which of the following is an indicator of maternal health?

- A) Infant mortality rate
- B) Average income
- C) Number of schools
- D) Access to clean water

Answer: A

5. What is a major focus of environmental health?

- A) Ensuring access to luxury goods
- B) Assessing the impact of environmental factors on human health
- C) Promoting sports and recreation
- D) Enhancing fashion trends

Answer: B

6. Public health interventions often target which of the following?

- A) Individual behavior changes only
- B) Entire communities and populations
- C) Personal fitness levels
- D) Corporate profit margins

Answer: B

7. Which principle is fundamental to effective health education?

- A) Providing information without considering the audience
- B) Using a one-size-fits-all approach
- C) Tailoring messages to the needs and understanding of the target audience
- D) Focusing solely on theoretical knowledge

Answer: C

8. What strategy is commonly used in health education?

- A) Passive information dissemination
- B) Interactive and participatory learning
- C) Avoiding community engagement
- D) Emphasizing only written materials

Answer: B

9. What is the main focus of the National Health Policy of India (2017)?

- A) Reducing global warming
- B) Ensuring access to healthcare services for all
- C) Enhancing international trade
- D) Improving academic performance in schools

Answer: B

10. Which organization is responsible for nutrition research and guidelines in India?

- A) National Institute of Nutrition (NIN)
- B) Food and Nutrition Board (FNB)
- C) Indian Dietetics Association (IDA)
- D) All of the above

Answer: D

11. What is the primary role of the Indian Council of Medical Research (ICMR)?

- A) Conducting medical research
- B) Regulating food safety
- C) Developing public health policies
- D) Providing health education

Answer: A

12. What does the Food and Nutrition Board (FNB) focus on?

- A) Conducting agricultural research
- B) Formulating and implementing nutrition policies
- C) Monitoring pharmaceutical drugs
- D) Regulating medical devices

Answer: B

13. Which organization is known for its global health initiatives and support in India?

- A) UNICEF
- B) National Health Mission
- C) Rashtriya Bal Swasthya Karyakram
- D) Janani Shishu Suraksha Karyakaram

Answer: A

14. What is the primary aim of the National Rural Health Mission (NRHM)?

- A) Improving health infrastructure in urban areas
- B) Strengthening healthcare delivery in rural areas
- C) Reducing industrial pollution
- D) Promoting international health tourism

Answer: B

15. The National Urban Health Mission (NUHM) is designed to: A) Enhance healthcare delivery in urban areas

- B) Focus solely on rural healthcare
- C) Develop rural infrastructure
- D) Address non-communicable diseases only

Answer: A

16. What is the primary focus of the Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+) program?

- A) Economic development
- B) Comprehensive health care for women and children
- C) Urban infrastructure development
- D) Industrial safety

Answer: B

17. What does the Janani Shishu Suraksha Karyakaram (JSSK) provide?

- A) Financial assistance for medical education
- B) Free and cashless services for pregnant women and newborns
- C) Infrastructure for urban development
- D) Loans for small businesses

Answer: B

18. What is the main goal of the India Newborn Action Plan (INAP)?

- A) Reducing infant mortality and morbidity
- B) Improving adult literacy rates
- C) Enhancing agricultural productivity
- D) Promoting urban transport systems

Answer: A

19. What is the Rashtriya Kishor Swasthya Karyakram (RKSK) primarily concerned with?

- A) Adolescent health and well-being
- B) Environmental conservation
- C) Urban planning
- D) Industrial safety standards

Answer: A

20. What is a key component of disaster management for controlling epidemics and pandemics?

- A) Increasing international trade
- B) Implementing containment and prevention measures
- C) Expanding entertainment facilities
- D) Improving real estate development

Answer: B

HEALTH & HYGEINE UNIT – 3

3.1 Notes on Hygiene – Definition; Personal, Community, Medical and Culinary hygiene; WASH (WATER, Sanitation and Hygiene) programme

Hygiene: Definition and Types

Definition of Hygiene: Hygiene refers to practices and conditions that help maintain health and prevent the spread of diseases. It involves cleanliness and sanitary practices to ensure health and well-being.

Types of Hygiene

1. Personal Hygiene

Definition: Practices that individual perform to maintain their own health and cleanliness.

Key Practices:

- **Handwashing:** Regular washing of hands with soap and water, especially before eating and after using the restroom.
- **Bathing:** Regularly cleaning the body with water and soap to remove dirt and sweat.
- **Oral Hygiene:** Brushing teeth twice a day and flossing to prevent dental issues and bad breath.
- **Nail Care:** Keeping nails trimmed and clean to prevent infections.
- **Hair Care:** Regular washing and grooming to maintain scalp health and cleanliness.

Importance: Helps prevent infections, diseases, and promotes overall health and well-being.

2. Community Hygiene

Definition: Hygiene practices that involve the entire community to promote a healthy environment and prevent the spread of diseases.

Key Practices:

- **Waste Management:** Proper disposal and management of waste to prevent contamination and breeding of disease vectors.
- **Clean Drinking Water:** Ensuring access to safe and clean drinking water to prevent waterborne diseases.
- **Sanitation Facilities:** Providing and maintaining clean and functional sanitation facilities, such as toilets and sewage systems.
- **Public Health Campaigns:** Organizing community health education and awareness programs about hygiene and disease prevention.

Importance: Reduces the spread of diseases, promotes a healthy living environment, and improves quality of life in communities.

3. Medical Hygiene

Definition: Hygiene practices in healthcare settings to prevent infections and ensure the safety of patients and healthcare workers.

Key Practices:

- **Sterilization:** Sterilizing medical instruments and equipment to prevent infections.
- **Hand Hygiene:** Regular handwashing and use of hand sanitizers by healthcare workers before and after patient contact.
- **Personal Protective Equipment (PPE):** Wearing appropriate PPE, such as gloves, masks, and gowns, to protect against infections.
- **Disinfection:** Cleaning and disinfecting surfaces and equipment in healthcare facilities to prevent cross-contamination.

Importance: Prevents healthcare-associated infections, ensures patient safety, and maintains a clean and sterile environment in medical settings.

4. Culinary Hygiene

Definition: Hygiene practices related to food preparation and handling to ensure food safety and prevent foodborne illnesses.

Key Practices:

- **Food Storage:** Properly storing food at the correct temperatures to prevent spoilage and contamination.
- **Cleanliness:** Maintaining cleanliness in the kitchen, including washing hands, surfaces, and utensils regularly.
- **Cooking Temperatures:** Cooking food to the recommended temperatures to kill harmful bacteria and pathogens.

- **Cross-Contamination Prevention:** Preventing the mixing of raw and cooked foods to avoid the spread of bacteria.

Importance: Ensures food safety, prevents foodborne illnesses, and promotes overall health through proper food handling practices.

WASH (Water, Sanitation, and Hygiene) Programme in India

Definition: The WASH program focuses on improving water supply, sanitation facilities, and hygiene practices to enhance public health and prevent disease.

Key Components of the WASH Programme:

1. **Water:**
 - **Access to Safe Water:** Ensures that communities have access to clean and safe drinking water.
 - **Water Quality:** Regular testing and treatment of water sources to prevent contamination and ensure safety.
 - **Water Supply Infrastructure:** Developing and maintaining infrastructure for water supply, including wells, pipelines, and storage facilities.
2. **Sanitation:**
 - **Toilets and Latrines:** Providing access to functional and hygienic toilets and latrines to improve sanitation and prevent open defecation.
 - **Waste Management:** Implementing systems for the proper disposal and treatment of human waste and other waste materials.
 - **Sanitation Facilities:** Ensuring that public and private sanitation facilities are clean, functional, and well-maintained.
3. **Hygiene:**
 - **Handwashing Campaigns:** Promoting regular handwashing with soap and water through public awareness campaigns and education.
 - **Hygiene Education:** Educating communities about the importance of hygiene practices and how to maintain cleanliness.
 - **Behavioral Change:** Encouraging the adoption of good hygiene practices through community programs and initiatives.

Implementation and Impact:

- **Government Initiatives:** The Government of India has launched several initiatives, such as the Swachh Bharat Mission (SBM), to improve WASH infrastructure and practices across the country.
- **Community Involvement:** Engaging communities in the planning and implementation of WASH programs to ensure that interventions are relevant and effective.
- **Health Outcomes:** Improved WASH facilities lead to better health outcomes, reduced disease burden, and enhanced quality of life for communities.

3.2. Notes on Rural Community Health: Village health sanitation & Nutritional committee (Roles & Responsibilities); About Accredited Social Health Activist (ASHA); Village Health Nutrition Day, Roji Kalyan Samitis in India

Rural Community Health in India

Rural community health initiatives focus on improving health and nutrition in rural areas through various committees and programs. Here are key components and their roles and responsibilities:

1. Village Health Sanitation and Nutrition Committee (VHSNC)

Definition: VHSNCs are community-based committees established to improve health, sanitation, and nutrition at the village level.

Roles and Responsibilities:

1. Health Promotion:

- **Awareness:** Educate villagers about health issues, preventive measures, and available health services.
- **Health Education:** Conduct health education sessions on topics such as hygiene, sanitation, and nutrition.

2. Sanitation and Hygiene:

- **Sanitation:** Oversee sanitation practices in the village, including waste disposal and clean drinking water.
- **Hygiene Promotion:** Promote hygiene practices like handwashing and proper use of toilets.

3. Nutritional Support:

- **Nutritional Education:** Provide information on balanced diets and nutrition for women and children.
- **Monitoring:** Monitor and report on nutritional status and malnutrition cases in the village.

4. Coordination and Planning:

- **Health Programs:** Coordinate with health departments and organizations to implement health programs.
- **Resource Mobilization:** Identify and mobilize resources needed for health, sanitation, and nutrition activities.

5. Reporting and Feedback:

- **Feedback:** Collect feedback from the community on health services and report issues to higher authorities.
- **Reporting:** Maintain records and report on health and nutrition statistics and activities.

Village Health Sanitation and Nutrition Committees



2. Accredited Social Health Activist (ASHA)

Definition: ASHAs are trained community health workers who play a crucial role in delivering healthcare services in rural areas.

Roles and Responsibilities:

1. Health Education and Promotion:

- **Awareness:** Educate community members about health issues, preventive measures, and available services.
- **Behavior Change:** Encourage healthy behaviors such as proper hygiene, family planning, and safe childbirth practices.

2. Health Services:

- **Home Visits:** Conduct regular home visits to provide basic health services, check on maternal and child health, and assist in immunizations.
- **Referral Services:** Refer patients to higher-level healthcare facilities for more complex care and treatments.

3. Support for Health Programs:

- **Immunization:** Facilitate immunization campaigns and ensure children receive necessary vaccines.
- **Maternal and Child Health:** Assist in antenatal care, postnatal care, and promote institutional deliveries.

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4. Community Mobilization:

- **Community Meetings:** Organize and participate in community meetings to discuss health issues and solutions.
- **Resource Mobilization:** Help mobilize resources and support for health programs and initiatives.

5. Data Collection and Reporting:

- **Record Keeping:** Maintain records of health services provided and community health status.
- **Reporting:** Report health issues and data to the local health authorities for further action.



ASHA WORKERS

3. Village Health Nutrition Day (VHND)

Definition: VHND is a community event organized to provide essential health and nutrition services to villagers, particularly women and children.

Key Activities:

1. **Health Services:**
 - **Health Check-Ups:** Provide free health check-ups and consultations for women and children.
 - **Immunizations:** Offer immunizations and vaccinations to protect against common diseases.
2. **Nutritional Support:**
 - **Nutrition Counseling:** Provide counseling on proper nutrition and dietary practices.
 - **Supplement Distribution:** Distribute nutritional supplements such as iron and folic acid to pregnant women and young children.
3. **Education and Awareness:**
 - **Health Education:** Conduct sessions on health, hygiene, and nutrition.
 - **Community Engagement:** Engage the community in discussions about health and nutrition issues and solutions.
4. **Coordination with Health Services:**

- **Integration:** Integrate VHND activities with ongoing health programs and services for better impact.
- **Follow-Up:** Ensure follow-up on health and nutrition issues identified during the VHND.



4. Rogi Kalyan Samitis (RKS)

Definition: Rogi Kalyan Samitis are patient welfare committees formed at healthcare facilities to improve service delivery and patient care.

Roles and Responsibilities:

1. **Facility Management:**
 - **Improvement:** Oversee and support the improvement of healthcare facilities, including infrastructure and equipment.
 - **Maintenance:** Ensure that healthcare facilities are well-maintained and clean.
2. **Patient Care:**
 - **Quality of Care:** Monitor and enhance the quality of patient care and services provided at healthcare facilities.
 - **Grievance Redressal:** Address patient grievances and feedback to improve service delivery.
3. **Resource Allocation:**
 - **Funding:** Manage and allocate funds for healthcare facility improvements and patient care.
 - **Resource Mobilization:** Identify and mobilize additional resources needed for the facility.
4. **Community Engagement:**
 - **Community Involvement:** Engage the community in health facility management and patient care activities.
 - **Awareness:** Promote health awareness and educate the community about available services.

5. Monitoring and Evaluation:

- **Monitoring:** Monitor the functioning of healthcare facilities and the effectiveness of services.
- **Evaluation:** Evaluate the impact of healthcare services and make recommendations for improvements.



3.3. Notes on Community & Personal Hygiene: Environmental Sanitation and Sanitation in Public places in India

Community & Personal Hygiene: Environmental Sanitation and Sanitation in Public Places in India

Community and personal hygiene are essential aspects of maintaining public health and preventing disease. In India, efforts focus on improving sanitation and hygiene at both individual and community levels, including in public spaces.

1. Community Hygiene

Definition: Community hygiene involves practices and measures taken to maintain a clean and healthy environment within a community to prevent the spread of diseases.

Key Aspects:

1. Waste Management:

- **Solid Waste Disposal:** Proper collection, segregation, and disposal of solid waste to prevent littering and contamination.

- **Waste Treatment:** Implementation of waste treatment processes such as composting and recycling to manage waste sustainably.
 - **Community Participation:** Engaging community members in waste management practices and cleanliness drives.
2. **Sanitation Facilities:**
 - **Clean Drinking Water:** Ensuring access to safe and clean drinking water through proper treatment and distribution.
 - **Toilets and Latrines:** Provision and maintenance of hygienic toilets and latrines to improve sanitation and prevent open defecation.
 - **Sewage Systems:** Development and maintenance of sewage systems to manage human waste and prevent contamination of water sources.
 3. **Environmental Cleanliness:**
 - **Public Awareness:** Educating community members about the importance of maintaining cleanliness and proper sanitation practices.
 - **Health Campaigns:** Organizing health campaigns to promote hygiene and prevent diseases.
 4. **Vector Control:**
 - **Mosquito Control:** Implementing measures to control mosquito breeding sites and prevent vector-borne diseases like malaria and dengue.
 - **Rodent Control:** Managing and controlling rodent populations to prevent disease transmission.

2. Personal Hygiene

Definition: Personal hygiene refers to practices individuals undertake to maintain their own cleanliness and health.

Key Aspects:

1. **Handwashing:**
 - **Frequency:** Regular handwashing with soap and water, especially before eating and after using the restroom.
 - **Technique:** Proper handwashing techniques to remove germs and prevent illness.
2. **Bathing and Cleanliness:**
 - **Daily Bathing:** Regular bathing to remove dirt, sweat, and bacteria from the body.
 - **Oral Hygiene:** Brushing teeth twice daily and flossing to maintain oral health and prevent dental issues.
3. **Nail and Hair Care:**
 - **Nail Care:** Keeping nails clean and trimmed to prevent infections and spread of germs.
 - **Hair Care:** Regular washing and grooming to maintain scalp health and prevent lice and other infections.
4. **Clothing and Footwear:**
 - **Clean Clothes:** Wearing clean clothes and changing them regularly to prevent skin infections.

- **Footwear:** Using clean and appropriate footwear to prevent foot infections and injuries.
-

3. Environmental Sanitation in India

Definition: Environmental sanitation involves maintaining cleanliness and hygiene in the surroundings to ensure a healthy environment.

Key Initiatives and Measures:

1. **Swachh Bharat Mission (SBM):**
 - **Objective:** Aims to improve sanitation and cleanliness across India by promoting toilet usage and waste management.
 - **Components:** Includes rural sanitation, urban cleanliness, and solid waste management.
2. **Clean India Campaigns:**
 - **Public Participation:** Encourages citizens to participate in cleanliness drives and maintain cleanliness in their surroundings.
 - **Infrastructure Development:** Focuses on building and upgrading sanitation infrastructure, such as public toilets and waste collection systems.
3. **Community-Led Total Sanitation (CLTS):**
 - **Approach:** Promotes behavior change and community involvement in achieving open defecation-free status.
 - **Implementation:** Engages communities in planning and implementing sanitation solutions and improving hygiene practices.
4. **Sanitation in Schools and Public Places:**
 - **School Sanitation:** Improving sanitation facilities in schools, including toilets, clean drinking water, and hygiene education.
 - **Public Toilets:** Construction and maintenance of public toilets in urban and rural areas to ensure accessibility and hygiene.

4. Sanitation in Public Places in India

Definition: Sanitation in public places refers to maintaining cleanliness and hygiene in areas accessible to the general public, such as parks, markets, and transportation hubs.

Key Measures and Practices:

1. **Public Toilet Facilities:**
 - **Availability:** Ensuring the availability of clean and functional public toilets in urban and rural areas.
 - **Maintenance:** Regular cleaning and maintenance of public toilets to ensure hygiene and usability.
2. **Waste Management:**

- **Public Waste Bins:** Providing adequate waste bins in public places for proper disposal of trash.
 - **Regular Collection:** Ensuring regular collection and disposal of waste from public areas to prevent littering and pollution.
3. **Cleanliness Drives:**
- **Community Engagement:** Organizing cleanliness drives and campaigns to maintain cleanliness in public places.
 - **Awareness Programs:** Educating the public about proper waste disposal and the importance of maintaining clean public spaces.
4. **Infrastructure Improvement:**
- **Upgradation:** Upgrading sanitation infrastructure in public places, including facilities for waste management and clean drinking water.
 - **Accessibility:** Ensuring that sanitation facilities are accessible to all individuals, including those with disabilities.



SWATCH BHARAT

3.4. Notes on Public Awareness through Digital Media - An Introduction to Mobile Apps of Government of India: NHP, Swasth Bharat, No More Tension, Pradhan Mantri Surakshit Mantritva Abhiyan (PM Suman Yojana), My Hospital (Mera aspataal), India fights Dengue, JSK Helpline, Ayushman Bhava, Arogya Setu, Covid 19AP

Public Awareness through Digital Media: Introduction to Mobile Apps of Government of India

The Indian government uses various mobile apps to improve public health awareness and provide essential services. These apps are designed to enhance accessibility to health information and services for the public. Here's an overview of some key apps:

1. National Health Portal (NHP)

A comprehensive platform for health-related information and services in India.

Features:

- **Health Information:** Provides reliable information on various health topics, diseases, and preventive measures.
- **Health Services:** Offers details on health services, facilities, and health programs available across India.
- **Online Services:** Allows users to access health-related services and resources online.

Objective: To make health information and services easily accessible to the public, promoting better health awareness and informed decision-making.

2. Swasth Bharat

An app focused on promoting health and well-being across India.

Features:

- **Health Tips:** Provides daily health tips and information on maintaining a healthy lifestyle.
- **Health Programs:** Information on various health programs and initiatives by the government.
- **Updates:** Regular updates on health policies, campaigns, and events.

Objective: To raise awareness about health issues and promote healthy living among the Indian population.

3. No More Tension

An app aimed at mental health and well-being.

Features:

- **Mental Health Resources:** Offers resources and tools for managing stress and mental health issues.
- **Counseling Services:** Provides access to counseling and support services for individuals experiencing mental health challenges.
- **Self-Help Tools:** Includes self-help tools and techniques for stress management and emotional well-being.

Objective: To support mental health by providing resources, counseling, and tools to manage

stress and mental health issues.

4. Pradhan Mantri Surakshit Matritva Abhiyan (PM Suman Yojana)

A scheme focused on improving maternal health through regular check-ups and services.

Features:

- **Maternal Health Services:** Provides information on maternal health services, including antenatal and postnatal care.
- **Health Records:** Allows tracking of maternal health records and appointments.
- **Awareness:** Educates users about maternal health issues and preventive measures.

Objective: To ensure safe and healthy pregnancies through regular check-ups and improved maternal health services.

5. My Hospital (Mera Aspataal)

An app for accessing information about hospitals and healthcare facilities.

Features:

- **Hospital Information:** Provides details about hospitals, including services, facilities, and contact information.
- **Ratings and Reviews:** Allows users to rate and review hospitals based on their experiences.
- **Appointment Booking:** Facilitates booking appointments with healthcare providers.

Objective: To improve accessibility to healthcare facilities and enhance user experience by providing detailed information and feedback options.

6. India Fights Dengue

An app dedicated to combating dengue fever through awareness and information.

Features:

- **Dengue Information:** Provides information on dengue fever, including symptoms, prevention, and treatment.
- **Awareness Campaigns:** Updates on ongoing campaigns and efforts to control dengue outbreaks.
- **Prevention Tips:** Offers tips and advice on preventing dengue fever and avoiding mosquito bites.

Objective: To raise awareness about dengue fever and promote preventive measures to control its spread.

7. JSK Helpline

A helpline app for addressing health-related queries and issues.

Features:

- **Health Queries:** Provides answers to health-related questions and concerns.
- **Helpline Services:** Access to helpline numbers for immediate assistance and support.
- **Information Access:** Offers information on various health services and programs.

Objective: To provide users with quick access to health information and support services through a dedicated helpline.

8. Ayushman Bhava

An app aimed at promoting the Ayushman Bharat scheme and its services.

Features:

- **Scheme Information:** Provides details about the Ayushman Bharat scheme, including eligibility, benefits, and services.
- **Enrollment Services:** Facilitates enrollment in the Ayushman Bharat scheme and access to health coverage.
- **Service Access:** Information on accessing health services and benefits under the scheme.

Objective: To enhance awareness and access to health services provided under the Ayushman Bharat scheme.

9. Arogya Setu

Definition: A COVID-19 tracking and health information app.

Features:

- **COVID-19 Tracking:** Provides information on COVID-19 cases and helps track exposure risk.
- **Health Advisory:** Offers health advice and guidelines related to COVID-19.
- **Symptom Checker:** Allows users to check symptoms and seek advice based on their health status.

Objective: To help users monitor COVID-19 exposure, access health information, and follow safety guidelines.

10. COVID-19 AP

Definition: An app specifically for COVID-19-related information and services in Andhra Pradesh.

Features:

- **COVID-19 Updates:** Provides the latest updates on COVID-19 cases and statistics in Andhra Pradesh.
- **Health Services:** Information on available health services, testing centers, and treatment facilities.
- **Vaccination Information:** Details on vaccination sites and schedules.

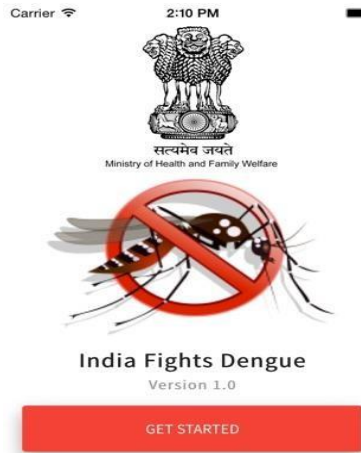
Objective: To provide localized information and support related to COVID-19 in Andhra Pradesh.

Summary

- **National Health Portal (NHP):** Provides comprehensive health information and online services.
- **Swasth Bharat:** Promotes health awareness and provides health tips.
- **No More Tension:** Focuses on mental health support and resources.
- **PM Suman Yojana:** Improves maternal health through regular check-ups.
- **My Hospital (Mera Aspataal):** Offers information about hospitals and facilitates appointments.
- **India Fights Dengue:** Provides information and awareness about dengue fever.
- **JSK Helpline:** Offers health-related queries and helpline services.

- **Ayushman Bhava:** Promotes the Ayushman Bharat scheme and services.
- **Arogya Setu:** Tracks COVID-19 exposure and provides health advice.
- **COVID-19 AP:** Provides COVID-19 information specific to Andhra Pradesh.

These apps play a crucial role in enhancing public health awareness, providing essential services, and improving accessibility to healthcare information.





UNIT-3 MCQ

1. What is the primary definition of hygiene?

- A) The study of infectious diseases
- B) The practice of maintaining health through cleanliness
- C) The process of treating illnesses
- D) The regulation of food safety

Answer: B

2. Which of the following best describes personal hygiene?

- A) Actions taken to clean and maintain health at an individual level
- B) Measures for controlling community diseases
- C) Policies for environmental sanitation
- D) Procedures for handling medical waste

Answer: A

3. What does community hygiene primarily focus on?

- A) Individual cleanliness
- B) Public health measures and sanitary conditions in communities
- C) Personal grooming
- D) Medical equipment sterilization

Answer: B

4. Which of the following is a key aspect of medical hygiene?

- A) Daily showering
- B) Proper handwashing before and after medical procedures
- C) Cleaning household surfaces
- D) Gardening

Answer: B

5. What does culinary hygiene involve?

- A) Cleaning cooking utensils and ensuring food safety
- B) Personal grooming while cooking
- C) Community sanitation
- D) Environmental cleanliness

Answer: A

6. What does the WASH program stand for?

- A) Water, Sanitation, and Hygiene
- B) Water, Safety, and Health
- C) Waste, Sanitation, and Hygiene
- D) Wellness, Safety, and Health

Answer: A

7. What is a primary goal of the WASH program?

- A) To improve access to clean water and proper sanitation
- B) To promote personal fitness
- C) To enhance medical research
- D) To support economic development

Answer: A

8. What is the role of the Village Health Sanitation & Nutritional Committee (VHSNC)?

- A) To oversee community healthcare, sanitation, and nutrition activities
- B) To regulate local businesses
- C) To manage urban development
- D) To handle administrative tasks in villages

Answer: A

9. What does an Accredited Social Health Activist (ASHA) do?

- A) Coordinates health services and provides health education at the community level
- B) Conducts medical research
- C) Manages hospital finances
- D) Develops national health policies

Answer: A

10. What is the purpose of Village Health Nutrition Day?

- A) To focus on health and nutrition education and services at the village level
- B) To promote local festivals

- C) To evaluate local businesses
- D) To conduct agricultural training

Answer: A

11. What is a key function of Rogi Kalyan Samitis?

- A) To enhance the quality of care in health facilities and involve the community in health services
- B) To develop new health policies
- C) To manage health infrastructure projects
- D) To regulate pharmaceuticals

Answer: A

12. What is a major component of environmental sanitation?

- A) Proper disposal of waste and maintenance of clean surroundings
- B) Personal grooming habits
- C) Indoor air quality only
- D) Economic development

Answer: A

13. Why is sanitation in public places important?

- A) To prevent the spread of infectious diseases and maintain public health
- B) To improve the aesthetics of the area
- C) To enhance property values
- D) To increase tourism

Answer: A

14. What is the purpose of the "Arogya Setu" app?

- A) To provide information and track COVID-19 exposure
- B) To manage hospital appointments
- C) To offer fitness tracking
- D) To facilitate online shopping

Answer: A

15. What is the "My Hospital" (Mera Aspataal) app designed for?

- A) To help users find and review hospitals
- B) To track fitness goals
- C) To provide educational content
- D) To manage personal finances

Answer: A

16. What is the goal of the "No More Tension" app?

- A) To provide mental health support and stress management resources
- B) To offer financial planning tools
- C) To enhance social networking
- D) To assist with cooking recipes

Answer: A

17. Which app is focused on providing information about dengue?

- A) India Fights Dengue
- B) Ayushman Bhava
- C) Pradhan Mantri Surakshit Mantritva Abhiyan (PM Suman Yojana)
- D) JSK Helpline

Answer: A

18. What does the "Ayushman Bhava" app aim to achieve?

- A) To promote wellness and health awareness
- B) To assist with travel planning
- C) To offer educational courses
- D) To manage daily routines

Answer: A

19. What is the primary function of the "Janani Shishu Suraksha Karyakaram" (JSSK) app?

- A) To provide free and cashless services for pregnant women and newborns
- B) To track daily exercise
- C) To offer cooking tips
- D) To manage household budgets

Answer: A

20. Which app supports the National Health Policy by providing information on health services and schemes?

- A) Swasth Bharat
- B) India Fights Dengue
- C) Arogya Setu
- D) My Hospital (Mera Aspataal)

Answer: A

THE END