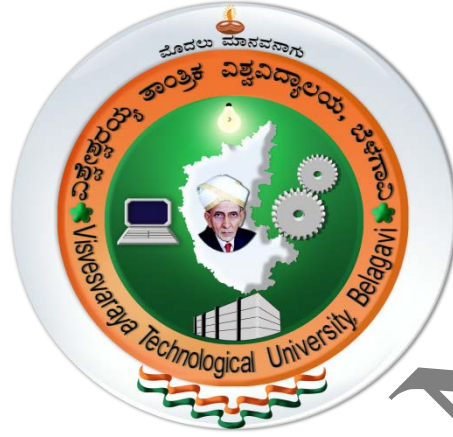


# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

## Visvesvaraya Technological University



Notes

University Module wise Notes, Material & Model Question Papers and Activities sheets for Students & Faculties of VTU

## Scientific Foundations of Health (SFH) (Health & Wellness) - 21SFH19/29

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## Scientific Foundations of Health (SFH) – (Health & Wellness) - 21SFH19/29

This course/ subject has been introduced under ability enhancement scheme in 2021 NEP – New scheme. As per the study and research, It is proved that health education is very important for all graduating students. If our students do not maintain good health, education without good health: is not a benefit and asset to the society or family. VTU has introduced this subject to enable the student community about Avoiding risks and recognizing the harmful habits in their campus and outside the campus for their bright future and also to make them to learn how to Prevent and fight against harmful diseases for good health through positive mindset. **This is the authorised material and notes for all VTU students and teaching faculties.**

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**This Material for all VTU students and teaching faculties.**



**This material/notes has been prepared to meet the immediate requirement of the VTU students and faculties. The task of upgrading the material is being taking place.**

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## Visvesvaraya Technological University

### Scientific Foundations of Health (Health & Wellness) - 21SFH19/29

#### Course objectives:

The course 21SFH29 will enable the students :

- To know about Health and wellness (and its Beliefs)
- To acquire Good Health & It's balance for positive mindset
- To Build the healthy lifestyles for good health for their better future
- To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world
- To learn about Avoiding risks and harmful habits in their campus and outside the campus for their bright future
- To Prevent and fight against harmful diseases for good health through positive mindset

#### Module-1

#### Good Health and It's balance for positive mindset:

What is Health, Why is Health Very Important Now? – What influences your Health?, Health and Behaviour, Health beliefs and advertisements, Advantages of good health (Short term and long term benefits), Health and Society, Health and family, Health and Personality - Profession. Health and behaviour, Disparities of health in different vulnerable groups. Health and psychology, Methods to improve good psychological health. Psychological disorders (Stress and Health - Stress management), how to maintain good health, Mindfulness for Spiritual and Intellectual health, Changing health habits for good health. Health and personality.

**Module-2****Building of healthy lifestyles for better future:**

Developing a healthy diet for good health, Food and health, Nutritional guidelines for good health and well beingness, Obesity and overweight disorders and its management, Eating disorders - proper exercises for its maintenance (Physical activities for health), Fitness components for health, Wellness and physical function, How to avoid exercise injuries.

**Module-3****Creation of Healthy and caring relationships :**

Building communication skills (Listening and speaking), Friends and friendship - education, the value of relationships and communication, Relationships for Better or worsening of life, understanding of basic instincts of life (more than a biology), Changing health behaviours through social engineering,

**Module-4****Avoiding risks and harmful habits :**

Characteristics of health compromising behaviors, Recognizing and avoiding of addictions, How addiction develops and addictive behaviors, Types of addictions, influencing factors for addictions, Differences between addictive people and non addictive people and their behavior with society, Effects and health hazards from addictions Such as..., how to recovery from addictions.

**Module-5****Preventing and fighting against diseases for good health :**

Process of infections and reasons for it, How to protect from different types of transmitted infections such as..., Current trends of socio economic impact of reducing your risk of disease, How to reduce risks for good health, Reducing risks and coping with chronic

conditions, Management of chronic illness for Quality of life, Health and Wellness of youth: a challenge for the upcoming future Measuring of health and wealth status.

#### Course outcome (Course Skill Set)

At the end of the course the student will be able :

- CO 1: To understand Health and wellness (and its Beliefs)
- CO 2: To acquire Good Health & It's balance for positive mindset
- CO 3: To inculcate and develop healthy lifestyle habits for good health.
- CO 4: To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world
- CO 5: To adopt innovative & positive methods to avoid risks from harmful habits in their campus & outside the campus.
- CO 6: To positively fight against harmful diseases for good health through a positive mindset.

#### Assessment Details (both CIE and SEE)

(methods of CIE need to be defined topic wise i.e.- MCQ, Quizzes, written test, Reports writing, Seminar and activities). The CIE needs to be conducted for 20 marks. The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks individually both in CIE and 35% marks in SEE to pass. MCQ Pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 30 marks (60 minutes duration). Based on this grading will be awarded.

#### Continuous Internal Evaluation (CIE) :

1. Continuous internal evaluation (CIE) needs to be conducted for 20 marks like Engineering courses - without any changes as per the University scheme and regulation (Modifications are not allowed).
2. Methods suggested: Quizzes, written quizzes and tests, Reports writing, Seminar and activities).
3. The class teacher has to decide the topic for the closed book test, Written Quiz, and Seminar. In the beginning, only the teacher has to announce the methods of CIE for the subject.

#### Semester End Examination (SEE) :

MCQ Pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 30 marks (60 minutes / 01 Hour duration).



# Module-1

**Good Health and It's balance  
for positive mindset:**

**Module-1****Good Health and It's balance for positive mindset:**

What is Health, Why is Health Very Important Now? – What influences your Health?, Health and Behaviour, Health beliefs and advertisements, Advantages of good health (Short term and long term benefits), Health and Society, Health and family, Health and Personality - Profession. Health and behaviour, Disparities of health in different vulnerable groups. Health and psychology, Methods to improve good psychological health. Psychological disorders (Stress and Health - Stress management), how to maintain good health, Mindfulness for Spiritual and Intellectual health, Changing health habits for good health. Health and personality.

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VTU - SEEH Notes



# Module – 1

## Good Health and It's balance for positive mindset

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### Preamble :

Physical fitness is not the sole basis of being healthy; being healthy means being mentally and emotionally fit. Being healthy should be part of your overall lifestyle. Living a healthy lifestyle can help prevent chronic diseases and long-term illnesses. Feeling good about yourself and taking care of your health are important for your self-esteem and self-image. Maintain a healthy lifestyle by doing what is right for your body.

### Positive thinking and Good Health :

**“One small positive thought can change your whole day”- Zig Ziglar.**

Positivity is something that can change somebody's way of thinking. It can revive someone full of negativity. Positive thinking or an optimistic attitude, is the process of focusing on the positive side of any situation. It plays an important role in an individual's personality, It might affect your physical and mental health. People who meditate daily are full of life as it upbeats them every day. It doesn't mean if you have positive thinking you would ignore your problems, it means facing those problems with a positive attitude. People with a positive attitude are more liable to live a healthy lifestyle since they have a more optimistic belief towards the future. Research has demonstrated that positive thinking helps people to manage mental illness and eases depression, regardless of whether they are generally optimistic or pessimistic.

### The Benefits of Positive Thinking (for Good Health):

- Longer life span
- Less stress and anxiety
- Have better immunity
- Better Cardiovascular condition
- Better Physical and Psychological health
- Good Resistance to common cold
- Better skills to tackle panic causing situations

## The mental benefits may include:

- More creativity
- Greater problem-solving skill
- Clear thinking
- Better mood
- Better coping skills
- Less depression

## How to maintain positive thinking for good health:-

### 1. Maintain a healthy lifestyle:-

Set a goal to work out at least for 30 minutes a day or go for a walk and or a jog. Consuming a healthy diet will assist to maintain positive thinking.

### 2. Laugh often:-

When you laugh, you feel less stress even if you are in stressful situations. A little smile or laugh can boost up your mood and make you feel relaxed. Pursue humor in your busy life.

### 3. Pen down your daily thoughts:-

Writing down your daily thoughts in journals can make you feel more relaxed and write down what you are grateful for. Small gratitude towards life or everyday happenings can lead towards positivity.

### 4. Meditate:-

Meditate regularly because it boosts your concentration level and positivity. If you focus on positive thinking then negativity will stay away from you.

### 5. Surround yourself with positive people:-

When you have positive people in your life you can depend upon them for helpful or positive direction. Negative people fill your life with negativity and will talk in a way that will demotivate you.

### 6. Balance:-

Balance is very important in leading a healthy personal as well as a professional life. . People get confused about how to balance both at the same time, and people with negativity lead nowhere. Filling positive thinking in life is like fuel. hen you think positively, you balance your personal and professional life perfectly which will reduce stress. This will result in better mental health. Being optimistic is the key to a successful life. A pessimistic person cannot perform life tasks properly and is unable to gain its rewards. A Balanced Positive Thinking is the process of establishing ambitions, potency, stability, and positive thinking skills as a foundation to build physical and psychological fitness: it takes attention, concentration, loyalty, and reproduction.

### 7. Mental health:-

### Scientific Foundations of Health

People who acquire negativity in their lives are pessimistic and pessimistic people are more likely to fall sick compared to optimistic people. Positive Thinking is the key to good mental health. When you think positively you see your life full of possibilities and you are less depressed. Optimistic people cultivate positive results in every situation. Focusing on positive thoughts rather than negative will help one to be less predisposed to depression, distress, and other forms of mental distractions. . When optimists do become depressed, they are more likely to recover more promptly than those who tend to be pessimistic. Optimists convert challenges into opportunities that make them happy and full of life.

## Health versus wellness :

While you cannot choose the state of health, you can consciously choose wellness by living your life responsibly and taking proactive steps for your well-being.

- Health comprises the diagnosis of a disease/illness, predisposition to a disease, and any unexpected injury.
- Wellness is an active process of growth and change to reach your fullest health and well-being. It is associated with actively pursuing activities, making choices and lifestyle changes, controlling risk factors that can harm a person, focusing on nutrition, having a balanced diet, and following spiritual practices that lead to holistic health.

Risk factors are actions or conditions that increase a person's risk of illness or injury. Some of the risk factors that can be harmful to good health are as follows:

- Smoking: It is a major risk factor for lung cancer and cardiovascular diseases.
- Drinking alcohol: It can cause liver damage, stroke, heart diseases, and cancer.
- Unprotected sex: It spreads sexually transmitted diseases including human immunodeficiency virus (HIV).
- Extreme physical activity/sports: This may lead to broken bones and other types of injuries.

## Definitions :

- Emotion: Subjective state of Mind, Reaction to Internal or external stimuli.
- Intellect : A person's Mental abilities. reasoning and understanding objectively.
- Psychological: Arising in mind. Related to mental and emotional State of a person.
- Physiological : Related to body, its parts and working
- Spiritual : Related to Soul or Human Spirit. No material or physical things.

## What is Health?

- Is a state of complete physical, mental, social and spiritual well being.
- Is maintaining the body as much as possible.
- Is following daily advice and preventive measures to reduce the possibility of diseases.



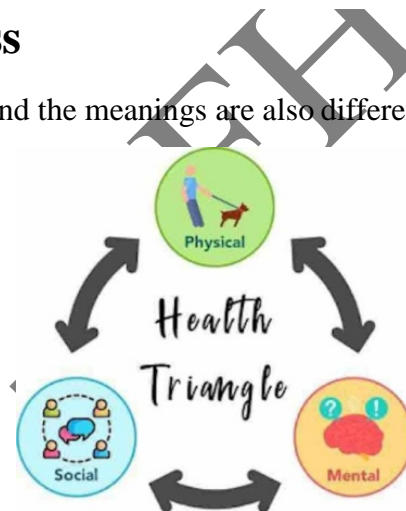
## What is the Definition of Health?

Health can be defined as a state of complete physical, mental, social and spiritual well being, which consists in maintaining the body as much as possible by following daily advice and preventive measures to reduce the possibility of diseases.

Health has an important role in feeling happy, as there are many people who suffer from diseases, but the health enables them to fight diseases, as a result, they achieve physical fitness and feel comfortable or enjoy life like any normal person.

## Health and Wellness

- Are two different concepts and the meanings are also different.



- The WHO defines health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'.
- WHO defines wellness as "the optimal state of health of individuals and groups," and wellness is expressed as "a positive approach to living."

- Health is a goal and wellness is the active process of achieving it. No health without wellness.



## Health Vs Wellness

- One cannot choose the state of health, but can consciously choose wellness by living the life with responsibly and taking proactive steps for the well-being.
- Health comprises the diagnosis of a disease/illness, predisposition to a disease, and any unexpected injury.
- Wellness is an active process of growth and change to reach your fullest health and well-being.
- Wellness is associated with actively pursuing activities, lifestyle changes, controlling risk factors, focusing on nutrition, having a balanced diet, and following spiritual practices that lead to holistic health.

## Wellness

- Wellness gets firmly associated with health and prevention.
- Wellness is the state or quality of being healthy.

## Well Being

- Well-being becomes more associated with happiness.
- Well-being is the state of being healthy, happy, or successful.

## **Risk Factors of Illness or Injury**

- Risk factors are actions or conditions that increase a person's risk of illness or injury.
- Tobacco, Smoking
- Boozing
- Drugs
- Non Hygienic
- Extreme Physical fitness activities.
- Negligence
- Adulterated Food
- Improper Diet and Nutrition

## **Dimensions of Wellness**

### **Physical**

- Physical wellness increases physical fitness; by being physically fit, a person would have an enhanced ability to prevent illness and diseases.
- Exercise stimulates a healthy mind and body.
- A sedentary lifestyle can be avoided by increasing physical activity in everyday life such as walking, cycling, walking the dog, taking the steps, and hiking.
- Having good nutrition, eating a balanced diet, drinking sufficient water (eight glasses per day), and getting adequate sleep promotes a person's physical wellness.

## **Intellectual**

- Mental exercise and engagement through learning, problem-solving, and creativity support intellectual well-ness and promote a better attitude.
- People who learn new things and challenge their mind can avoid mental health problems.

## **Emotional**

- A person with emotional wellness can deal with stressful situations. A person who is aware of their own feelings has good self-esteem, and has empathy toward others' feelings would have emotional wellness.

## **Environmental**

- Awareness of the role we play in improving our natural environment rather than denigrating it and maintaining and living in a healthy physical environment free of hazards promotes wellness.

## **Social**

- Social circles and support networks are invaluable to the overall well-being of a person. Relating, interacting, and contributing to a community, establishing good interpersonal relations, and maintaining long-term relationships with family and friends keep a person happier and healthier.

## **WHO Principles - What is Health?**

- Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
- The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.
- The health of all peoples is fundamental to the attainment of peace and security and is

dependent on the fullest co-operation of individuals and States.

- The achievement of any State in the promotion and protection of health is of value to all.
- Unequal development in different countries in the promotion of health and control of diseases, especially communicable disease, is a common danger.
- Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.
- The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.
- Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.
- Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

### **Types of Health**

- Mental and physical health are probably the two most frequently discussed types of health.
- Spiritual, emotional, and financial health also contribute to overall health.
- Medical experts have linked these to lower stress levels and improved mental and physical well-being.

### **Physical Health**

- A person who has good physical health is likely to have bodily functions and processes working at their peak and is due to the absence of disease.
- Regular exercise, balanced nutrition, and adequate rest contribute to good health.
- People receive medical treatment to maintain the balance, when necessary.
- Physical well-being is pursuing a healthful lifestyle to reduce the risk of disease.





- Maintaining physical fitness, breathing and heart function, muscular strength, flexibility, and body composition.

*Looking after physical health and well-being also involves reducing the risk of an injury or health issue, such*  
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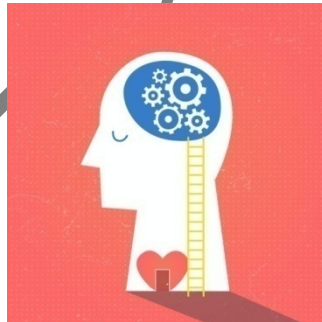
- Minimizing hazards in the workplace
- Practising effective hygiene.

## ***Connection between Physical and Mental Health***

- Good physical health can work in tandem with mental health to improve a person's overall quality of life.
- For example, mental illness, such as depression, may increase the risk of drug use disorders, according to a 2008 study
- This can go on to adversely affect physical health.

## **Mental Health**

- Mental health refers to a person's emotional, social, and psychological well-being.
- Mental health is as important as physical health as part of a full, active lifestyle.
- It is harder to define mental health than physical health because many psychological diagnoses depend on an individual's perception of their experience.
- With improvements in testing, however, doctors are now able to identify some physical signs of some types of mental illness in CT scans and genetic tests.



*Good mental health is not only categorized by the absence of depression, anxiety, or another disorder. It also depends on a person's ability to :*

- Enjoy life
- Bounce back after difficult experiences and adapt to adversity
- Balance different elements of life, such as family and finances

- Feel safe and secure achieve their full potential

### *Connection between Mental and Physical Health*

- A chronic illness affects a person's ability to complete their regular tasks, it may lead to depression and stress. These feelings could be due to financial problems or mobility issues.
- A mental illness, such as depression or anorexia, can affect body weight and overall function.

### **Summary**

- It is important to approach "health" as a whole, rather than as a series of separate factors.
- All types of health are linked, and people should aim for overall well-being and balance as the keys to good health.

### **Why Health is So Important?**

- Health is the body's functional and metabolic efficiency, and its ability to adapt to the physical, mental, and social changes that it is exposed to.
- Health is the opposite of disease, and also means the safety of the body from physical, social, and mental disorders.
- Health is the factor that helps a person perform his daily life tasks in a correct and right way.
- A person's physical health means that the body does not have any diseases in all parts of his body, and the safety of all its membranes.
- While mental and social health is represented by the ability of a person to accomplish social tasks entrusted to him without defect or error.



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While mental and social health is represented by the ability of a person to accomplish social tasks entrusted to him without defect or error.

The importance of good health in a person's life is undoubtedly great.

How we can achieve good health and well-being. Let's start!

➤ A healthy person is a person who is able to serve himself, his nation and his community.

An unhealthy person who suffers from illness sees him weak and meager, unable to properly carry out the duties and responsibilities incumbent on him.

When the disease develops, the person becomes dependent on other people and cannot meet his different needs in life, which affects his psyche as well due to his sense of helplessness and weakness.

Society is also affected by the presence of the disease among its members, as the productivity of these patients weakens and they become dependent on society.

As for the presence of healthy individuals in society, this means the presence of productive individuals who possess the power and the ability to give and serve.

➤The importance of health for a person is that it saves him the costs of treatment and the hassle of going to hospitals.

A healthy person who is far from the disease sees him saving money that he would have spent on the disease if he neglected his health, so it is always said that "an ounce of prevention is worth a pound of cure".

You see many governments that are exposed to the spread of epidemics and diseases among their members spend a large part of the money to buy medications to treat these cases.

You also see governments and societies that are concerned with the safety of their people focusing on aspects of prevention and health guidance.

➤Psychologically healthy people feel comfortable and happy in their lives and enjoy life well.

A person who suffers from mental illnesses always sees him as a gloomy and pessimist and does not feel happy in his life and in his relationships with people.

While you see a healthy person enjoying happiness in his life, establishing his relationships with people and showing love, kindness, and intimacy.

Finally, a person must consider many matters and behaviors in life in order to avoid diseases that interfere with his life and to know that illness may be part of the many trials that a person is exposed to.

Staying healthy has never been so important as the need to remain in good health can have a positive effect on almost every aspect of our lives. Staying fit can be done in a variety of ways, including eating lean and healthy meats along with plenty of fruits and vegetables. Spending a little time each day exercising can help us all to become healthy and avoid the modern blight of obesity.

### *Importance of good health in human life :*

- A healthy person is a person who is able to serve himself, his nation and his community.

- The importance of health for a person is that it saves him the costs of treatment and the hassle of going to hospitals.
- Psychologically healthy people feel comfortable and happy in their lives and enjoy life well.

### *More on Importance of good health in human life :*

- Helps you live longer
- Feel better about yourself
- Life insurance is cheaper
- Lower levels of stress and anxiety
- Limit the desire for the addictive substance
- Better vision by healthy diet and cardio-vascular exercise.
- Lower medical costs
- increase in fertility
- Satisfying life and good self esteem.

### **How to achieve good health and well being?**

- Eating healthy meals
- More vegetables and Fruits in the diet
- Consuming appropriate amount of water
- Regular exercises
- Avoiding obesity and Loosing extra weight
- Maintaining good hygiene
- Good enough sleep
- Prevent substance abuse
- Making better life style choices

- Realistic and achievable goal
- Enough money

## What influences your Health?



## Health and Behaviour

1. Health behaviour refers to actions that an individual engages in that affect their health either positively or negatively.
2. The actions may be intentional or unintentional, and can promote or detract from the health of the actor or others.
3. Actions examples - smoking, substance use, diet, physical activity, sleep, risky sexual activities, health care seeking behaviours, and adherence to prescribed medical treatments.
4. Addressing health behaviours requires strategies to encourage individuals to engage in healthy behaviours and access nutritious food, safe spaces to be physically active, and support to make healthy choices.

## Health beliefs

1. What people believe about their health
2. What they think constitutes their health
3. What they consider the cause of their illness and ways to overcome it.

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4. Beliefs are culturally determined, and all come together to form larger health belief systems.
5. The HBM attempts to predict health-related behavior in terms of certain belief patterns.
6. A person's motivation to undertake a health behavior is categorized : individual perceptions, modifying factors, and likelihood of action.

## **How does advertising affect our health?**

1. Food industry advertising that targets children and youth has been linked to the increase of childhood obesity.
2. Advertising by other industries often objectifies girls and women, contributing to body dissatisfaction, eating disorders, low self-esteem and depression.
3. The concept of "good advertising makes us believe that something is better than actually is" doesn't have to do with buying things that we don't like just because we saw it on the internet
4. Advertisers think about what consumers want and need, and how they can meet those wants and needs.

## **Health and Society**





- Adults who are socially active live longer and are healthier than their more isolated peers. Social relationships are vital to maintaining good health.
- Conversely, social isolation creates health risks. Studies have shown that for patients with coronary artery disease, social isolation creates added risk of death.
- Good health is an important enabler of positive family and community life.
- It enables people to participate in, and contribute to, society in different ways.

## Health and Family



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- Umberson (1987) states that family members influence health behaviours through indirect and direct control mechanisms.
- Family members may also directly regulate one's health behaviour by physical means and supportive behaviours.
- Every family member can influence another family member's health attitudes and behaviours through communication.
- Research reveals that critical comments from family members predicts the chance of relapse in depression, eating disorders, and schizophrenia.
- Family members can support our decision to enact healthier behaviours.

## Personality Traits



## Health and Personality - Profession

- Through its influence on thoughts, emotions, behaviours, and environments, personality is one of the best psychological predictors of physical health.
- Personality is measured using the Big Five framework made up of extroversion, conscientiousness, openness, neuroticism, and agreeableness
- The disordered personality was significantly predictive of worse physical functioning, role limitations, fatigue, and pain.
- In the workplace, your personality affects how you interact with your colleagues, managers, and clients and it may also have an impact on your earnings potential, your career trajectory, and job satisfaction.

## Disparities of health in different vulnerable groups

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- Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location;
- In India the vulnerable groups that face discrimination include Women, Scheduled Castes (SC), Scheduled Tribes (ST), Children, Aged, Disabled, Poor migrants, People living with HIV/AIDS and Sexual Minorities.

## Health and Psychology

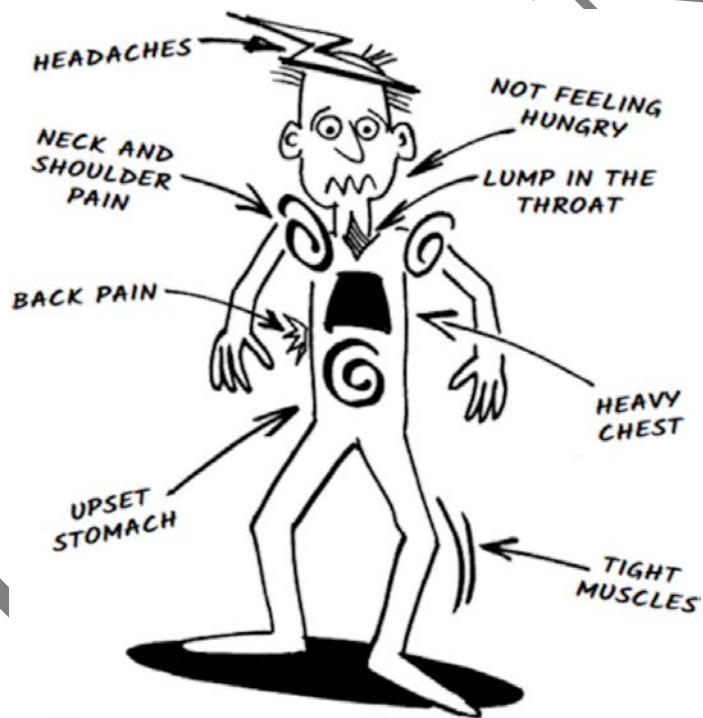
- Health psychology is the study of psychological and behavioral processes in health, illness, and healthcare.
- It is concerned with understanding how psychological, behavioral, and cultural factors contribute to physical health and illness. Psychological factors can affect health directly.
- Psychological factors can affect health directly.
- The goal of health psychology is to apply health education, information, prevention, and control in ways that will alleviate patients' physical symptoms and improve their lives.

## Psychological disorders (Stress and Health - Stress management)

- Stress can be defined as any type of change that causes physical, emotional, or psychological strain.
- Stress is your body's response to anything that requires attention or action.
- Signs: Psychological, Emotional, Physical & Behavioural.

## Types of Stresses

- *Acute stress* is a very short-term type of stress that can either be positive or more distressing; this is the type of stress we most often encounter in day-to-day life.
- *Chronic stress* is stress that seems never-ending and inescapable, like the stress of a bad marriage or an extremely taxing job.
- *Episodic acute stress* is acute stress that seems to run rampant and be a way of life, creating a life of ongoing distress.
- *Eustress* is fun and exciting. It's known as a positive type of stress that can keep you energized. It's associated with surges of adrenaline, such as when you are skiing or racing to meet a deadline.



## Coping with Stresses

- Learn to recognize the signs of burnout. High levels of stress may place you at a high risk of burnout. Burnout can leave you feeling exhausted and apathetic about your job.
- When you start to feel symptoms of emotional exhaustion, it's a sign that you need to find a way to get a handle on your stress.

- Try to get regular exercise. Physical activity has a big impact on your brain and your body. Exercise reduces stress and improves many symptoms associated with mental illness
- Take care of yourself. Incorporating regular self-care activities into your daily life is essential to stress management. Learn how to take care of your mind, body, and spirit and discover how to equip yourself to live your best life.
- Practice mindfulness in your life. Mindfulness isn't just something you practice for 10 minutes each day. It can also be a way of life. Discover how to live more mindfully throughout your day so you can become more awake and conscious throughout your life.

## **Mindfulness for Spiritual and Intellectual health personality**

- Mindfulness simply means paying attention to the present moment, on purpose, non-judgmentally.
- Mindfulness can be cultivated through meditation
- It is the only one technique that can increase mental health and well-being.
- Several therapeutic techniques have been based on these practices, such as mindfulness-based stress reduction and mindfulness-based cognitive therapy.
- One can be mindful, observing their surroundings in the present moment, without being spiritual

### **Healthy Lifestyle Benefits:**

A healthy lifestyle can help you feel better. Even better, you don't have to overhaul your entire life overnight. It's pretty easy to make a couple of small changes that can steer you in the direction of improved well-being. And once you make one change, that success can motivate you to continue to make more positive shifts.

## **You may find the below 5 benefits if your long term health is pursued:**

**1. Decreased risk of disease.** Dis-ease in the body occurs when it's stressed, nutritionally imbalanced, and/or neglected of self-care. Often times, these occur simultaneously. To bring the body back into a state of balance, it's essential we begin to adopt more sustainable behaviors. These behaviors are by no means difficult, they're just different than the ones you currently subscribe to. Remember, life is a practice, not a performance.

**2. More life-force energy.** It is physically impossible for the body to have optimal energy when inundated with poor quality foods, chemicals, and long term stress. Each of these respond negatively in the body and inhibit its ability to sustain energy levels for extended periods of time. Give the body what it requires and desires, such as wholesome nourishment, sunlight, clean water, and movement, and you will experience a dramatic shift in your daily energy levels.

**3. Increased happiness, less depression.** The gut contains 100 million neurons and is responsible for secreting major neurotransmitters like serotonin, dopamine, glutamate, norepinephrine and nitric oxide. When we nurture the health of our gut, we invite these feel-good chemicals to be secreted more easily and more frequently, thus influencing the state of our mood.

**4. Increased feelings of self-worth.** As you begin to experience mood shifts and desirable body changes, you will begin to make self-care a priority. Simple as that.

**5. Save money.** Leading a lifestyle of healthy behaviors allows for more money in your pocket by increasing work productivity, eradicating doctor visits, and decreasing missed work due to feeling ill and unwell. You'll have extra funds to do things you love with those you love!

Quite literally, there are infinite benefits one will receive by way of pursuing a healthy lifestyle.

## Other Important Benefits :

### 1. Helps You Live Longer

This is one of the most obvious benefits of living a healthy lifestyle and is one of the main reasons why most people look to exercise and eat a healthy diet. For those determined to get the most out of their body in terms of longevity, there is a whole host of evidence that links staying healthy with longer life. One study went so far as to estimate the link between only drinking alcohol in moderation, not smoking, exercising regularly, and eating a healthy diet can extend your life by up to 14 years.

### 2. Feel Better About Yourself

One of the main reasons why staying healthy can be of assistance to your life as you grow older. One of the main benefits is that living a healthy lifestyle can make you feel more confident than ever before. Exercising can release hormones to your brain that enhance your mood and provide you with a sense of euphoria.

### 3. Life Insurance is Cheaper

One of the primary considerations you will have when you grow older is the need to purchase life insurance to protect your family in the event of your death. You may be you like term life insurance vs whole life insurance policies, but whichever you choose, you will face lower premiums when you live a healthy lifestyle.

### 4. Control Your Stress

The modern world we live in is undoubtedly stressful, with the ability to switch off from work being a significant problem. One of the issues facing us is how to handle stress with exercise. Those who live a healthy lifestyle have been proven in clinical studies to have lower levels of stress and anxiety.

### 5. Avoid Addictions

No matter what kind of addiction you are affected by, a healthy lifestyle filled with exercise can limit your desire for the addictive substance. Whether your vice of choice is food, drugs, or alcohol, you will find a runner's high just as addictive.

#### 6. Protect your Sight

This may not be a well-known aspect of living a healthy lifestyle, but your eyesight can be protected by a healthy diet and a proper diet. Better vision as we age can be obtained with regular cardiovascular exercise.

#### 7. Lower Medical Costs

This may seem like a no-brainer, but by staying healthy, your medical bills will be significantly lower. Lower medical costs will often lead to fewer debts and a higher credit score.

#### 8. Increase your Fertility

If you are looking for a fertile future with lots of children, the gym is the place to go. Studies conducted by Harvard University researchers showed a higher sperm level among males who exercised regularly.

#### 9. Consider your Self-Esteem

When you exercise regularly, you will usually find you look and feel better, leading to a rise in your confidence. Higher self-esteem can lead to a more satisfying life.

#### 10. Become a Good Example

Exercising regularly and living a healthy lifestyle will rub off on those around you. When your children and grandchildren see you exercising and eating healthily, they will be more likely to follow your example.

- A person's physical health means that the body does not have any diseases in all parts of his body, and the safety of all its membranes. While mental and social health is represented by the ability of a person to accomplish social tasks entrusted to him without defect or error.



- Psychologically healthy people feel comfortable and happy in their lives and enjoy life well.
- A person who suffers from mental illnesses always sees him as a gloomy and pessimist and does not feel happy in his life and in his relationships with people.

While you see a healthy person enjoying happiness in his life, establishing his relationships with people and showing love, kindness, and intimacy.

### **Health and Society :**

- Health is essential to eradicating extreme poverty and promoting growth of well-being
- The analysis show that over past decade, health improvements constitutes 24% of full income growth in low-and middle- income countries.
- Why are health factors important to society?
- People who fit into society are likely to be more content and healthier even in the most affluent countries.

### **Improved mental Health clarity :**

- Having a healthy body and mind would make you think clearer. Whenever you're experiencing a crisis and you need to find out a solution quickly, you'll tend to make a wise decision if you're in good health. This is because being fit – both physically and mentally, would let you concentrate better on certain things and encourage clarity of thoughts. On the contrary, if you're having a poor health condition, your mind will become tired easily when you're trying to concentrate on things. Also, you'll get distracted easily with the discomforts associated with your health issues.

### **Increased capacity of fighting diseases :**

- Good health helps avert certain diseases including high blood pressure, stroke, heart disease etc. When you maintain good health, you'll be able to keep your blood pressure and cholesterol within a safe range. This makes your blood

circulation smooth, lowering the risks of various cardiovascular diseases. In addition, good health comprising of proper diet and regular physical activity can also prevent or help you better manage health problems such as diabetes, depression, metabolic syndrome, arthritis and certain kinds of cancer, among others.

## How to achieve wellbeing :

- Develop and maintain strong relationships with family and friends.
- Make regular time available for social contact.
- Try to find work that you find enjoyable and rewarding, rather than just working for the best pay.
- Eat wholesome, nutritious foods.
- Do regular physical activity.
- Become involved in activities that interest you.
- Join local organisations or clubs that appeal to you.
- Set yourself achievable goals and work towards them.
- Try to be optimistic and enjoy each day.

## Factors that influence wellbeing :

Every aspect of your life influences your state of wellbeing. Researchers investigating happiness have found the following factors enhance a person's wellbeing:

- Happy intimate relationship with a partner.
- Network of close friends.
- Enjoyable and fulfilling career.
- Enough money.
- Regular exercise.
- Nutritional diet.
- Enough sleep.
- Spiritual or religious beliefs.
- Fun hobbies and leisure pursuits.
- Healthy self-esteem.

- Optimistic outlook.
- Realistic and achievable goals.
- Sense of purpose and meaning.
- A sense of belonging.
- The ability to adapt to change.
- Living in a fair and democratic society.



## ***How can You Achieve Good Health and Well Being?***

The following ways can help you achieve good health and well-being:

### **Eat healthy meals:**

What you eat is closely related to your health. Eating a healthy diet can help boost your immune systems, help you maintain a healthy weight and can improve your overall health.

### **Add more fruits and vegetables to your diet:**

Include fruits, vegetables, grain products, leafy greens, salmon, etc. in your diet. Adding fruits and vegetables is an ideal basis to start a healthy routine.

### **Drink a lot of water:**

Drinking a lot of water keeps muscles and joints working, increases the amount of water in your blood, promotes healthy skin and cardiovascular health and helps cleanse toxins from your body. You can save a lot of money and improve your health by drinking water all day.



### **Get regular exercise:**

Do a moderate workout for at least 30 minutes a day, as exercise can help prevent heart disease, stroke, colon cancer, and diabetes.



### **Lose your extra weight:**

Lose weight if you are overweight. If you want to lose extra weight, you have to reduce the number of calories you consume, so you have to become a good record-keeper.

If you are obese, losing weight can mean "less heart disease, less cancer and less diabetes.

**Wash your hands before eating a meal:**

Hand washing before eating is a good habit and an effective way to prevent infection.

If you eat something without washing your hands, it is possible that the bacteria and germs that remain on your fingers and palms can be moved into your mouth.

This can affect your overall health and cause diseases and infections.

**Protect your skin:**

Your skin is the first layer of defense in the body, and you need to protect it. In summer, a lot of sunlight is very harmful to your skin cells because UV rays damage or even kill your skin cells.

In winter, fluctuations, redness, allergies and irritation are common skin diseases among many of us.

Cold temperatures and low humidity levels create dry air that pulls moisture away from the skin.

Therefore, protect your skin in both seasons.

**Get enough sleep:**

Sleep plays an important role in good health and well-being throughout your life because it enables the body to repair and be fit and ready for another day.

Getting enough sleep at the right times may help prevent physical health problems such as excess weight gain, heart disease, protect your mental health issues and improve your quality of life and safety.

**Prevent substance abuse:**

Avoid smoking, tobacco, alcohol, caffeine and sugary drinks. Smoking, alcohol, and tobacco consumption are harmful to your health, so avoid such things as soon as possible.

When you quit, you will greatly reduce the risk of death from lung cancer and other life-threatening diseases such as heart disease, stroke, emphysema, chronic bronchitis, etc.

**Make your lifestyle choices better:**

You can understand what you should do to enjoy a healthy, happy life.

Poor lifestyle choices contribute significantly to the development and progression of preventable chronic diseases.

Improve your lifestyle, adopt healthy lifestyle choices and create good and healthy habits so that you can make healthy changes in your life.

Carve out time to exercise and find a way to ratchet down stress and depression.

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- 1) [https:// w.w.w Medical News today.com](https://w.w.w.MedicalNewsToday.com)
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# MCQ Pattern Questions for Practice

## with Key answers

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TES

### Part – I

1. The World Health Day is celebrated on \_\_\_\_\_.

- (a) 1st March
- (b) 7th April
- (c) 6th October
- (d) 10th December

**Sol: (b) 7th April.**

2. Cleanliness, physical exercise, rest and sleep are a part of \_\_\_\_\_.

- (a) Hygiene
- (b) Social hygiene
- (c) Personal hygiene
- (d) None of the above

**Sol: (c) Personal hygiene.**

3. Which one of the following is an unhealthy habit?

- (a) Sharing food
- (b) Bathing twice a day
- (c) Drinking boiled water

(d) Eating without washing one's hand

**Sol: (d) Eating without washing one's hand.**

**4. Which one of the following is not a bacterial disease?**

(a) AIDS

(b) Dengue

(c) Measles

(d) All of the above

**Sol: (d) All of the above.**

**5. Which of the following diseases is also called as "Salmonella enterica serotype Typhi"?**

(a) Typhoid

(b) Malaria

(c) Diarrhea

(d) Yellow fever

**Sol: (a) Typhoid.**

**6. Which of the following is the main cause for transmission of the Hepatitis virus?**

(a) The bite of a mosquito

(b) Sharing drug needles

(c) Drinking contaminated water

(d) All of the above

**Sol: (b) Sharing drug needles.**

**7. Which of the following statements is true about contamination?**

- (a) Contamination is caused by the entry of germs by an insect bite
- (b) Contamination is caused by the entry of germs by an animal bite
- (c) Contamination is caused by the entry of germs into drinking water or edible foods.
- (d) None of the above

**Sol: (c) Contamination is caused by the entry of germs into drinking water or edible foods.**

**8. Which of the following diseases is not caused by bacteria?**

- (a) Typhoid
- (b) Poliomyelitis
- (c) Tuberculosis
- (d) All of the above.

**Sol: (b) Poliomyelitis.**

**9. The main cause of contagious disease is \_\_\_\_\_.**

- (a) Contaminated Air
- (b) Contaminated Food
- (c) Poor hygienic conditions
- (d) All of the above

**Sol: (d) All of the above.**

**10. Which of the following factors is necessary for a healthy person?**

- (a) Vaccination
- (b) Balanced diet
- (c) Personal hygiene
- (d) All of the above



**Sol: (d) All of the above.**

## **Part : II**



**1. Which of the following components are major nutrients in our food?**

- (a) Carbohydrates
- (b) Lipids and Proteins
- (c) Vitamins and Minerals
- (d) All of the above

**Sol: (d) All of the above.**

**2. Which of the following food components is required for the growth and maintenance of the human body?**

- (a) Proteins
- (b) Vitamins
- (c) Minerals
- (d) Both (a) and (b)

**Sol: (d) Both (a) and (b)**

**3. Which of the following food components give energy to our body?**

- (a) Proteins
- (b) Vitamins
- (c) Minerals

(d) Carbohydrates

**Sol: (d) Carbohydrates.**

**4. Which of the following food items provides dietary fibre?**

(a) Pulses

(b) Wholegrain

(c) Fruits and vegetables

(d) All of the above

**Sol: (d) All of the above.**

**5. Which of the following food products are the best sources of animal proteins?**

(a) Milk

(b) Egg

(c) Cheese

(d) All of the above.

**Sol: (d) All of the above.**

**6. Which of the following mineral functions by building strong bones and teeth?**

(a) Iodine

(b) Calcium

(c) Iron

(d) Sodium

**Sol: (b) Calcium.**

**7. Egg is a rich source of \_\_\_\_\_.**

- (a) Proteins
- (b) Vitamins
- (c) Minerals
- (d) All of the above

**Sol: (d) All of the above.**

**8. Which of the following food components does not provide any nutrients?**

- (a) Milk
- (b) Water
- (c) Fruit Juice
- (d) Vegetable soup

**Sol: (b) Water.**

**9. Which of the following food items is the best source of plant proteins?**

- (a) Milk
- (b) Egg
- (c) Legumes
- (d) Cheese

**Sol: (c) Legumes.**

**10. Which of the following food components is rich in fat?**

- (a) Rice and Maize
- (b) Milk, egg and beans
- (c) Butter, cheese and oil

(d) None of the above

**Sol: (c) Butter, cheese and oil.**

**11. Which of the following statements is false about nutrients in milk?**

- (a) Milk is a good source of calcium
- (b) Milk is a good source of protein
- (c) Milk is a good source of vitamin C
- (d) Milk is a good source of vitamin D

**Sol: (c) Milk is a good source of vitamin C.**

**12. Guava, Lemon, Orange and Tomato are rich in \_\_\_\_\_.**

- (a) vitamin A
- (b) vitamin B
- (c) vitamin C
- (d) vitamin D

**Sol: (c) vitamin C.**

**13. Potatoes, cereals, beans, pulses and oats are rich in \_\_\_\_\_.**

- (a) Proteins
- (b) Vitamins
- (c) Minerals
- (d) Carbohydrates

**Sol: (d) Carbohydrates.**

**14. Which of the following is not a component of food?**

- (a) Fats
- (b) Fibres
- (c) Water
- (d) None of the above

**Sol: (d) None of the above.**

**15. The most significant and essential mineral required for our body is \_\_\_\_\_.**

- (a) Iron
- (b) Sodium
- (c) Calcium
- (d) All of the above

**Sol: (d) All of the above.**



VTU - R

## Part ; III

1. Which of the following statements is correct?

- a. Evidence from a variety of social surveys has confirmed the increasingly sedentary lifestyle of modern society.
- b. In 2008, the most common form of occupational and non-occupational physical activity in England was walking.
- c. The most common barriers to doing more physical activity identified by adults in England were work commitments and a lack of leisure time.
- d. all of these

**Answer: D**

2. Which of the following diseases have been associated with sedentary lifestyle?

- a. colon cancer
- b. stroke
- c. cardiovascular disease
- d. all of these

**Answer: D**

3. Environmental psychologists emphasize the importance of taking which of the following into consideration when examining behaviour?

- a. genetics
- b. brain structure
- c. physical and social context
- d. none of these

**Answer: C**

4. Which of the following models propose that behaviour, such as physical activity and exercise, is predicted by intention to engage in such behaviour, which in turn is predicted by the individual's attitude towards exercise and the perceived social norm?

- a. health belief model
- b. theory of reasoned action
- c. transtheoretical model
- d. none of these

**Answer: B**

5. Health compromising behaviors are commonly seen in **Answer:**people from

A. high class

- B. middle class
- C. low class
- D. none of these

**Answer:**C. low class

6. Alcohol consumption has been linked to

- A. liver cirrhosis
- B. high blood pressure
- C. stroke
- D. all of the above

**Answer:** D. all of the above

7. When findings are difficult to generalize to the world outside of the laboratory, we say the research is lacking in \_\_\_\_\_ validity.

- a. ecological
- b. economical
- c. empirical
- d. experimental

**Answer:** A

8. More research is necessary to confirm the assumption that \_\_\_\_\_ cause positive changes to quality of life.

- a. lifestyle changes
- b. research findings
- c. survey data
- d. questionnaire responses

**Answer:** A

9. Which of the following processes are important in explaining obesity?

- a. food environment
- b. physical activity
- c. individual psychology
- d. all of these

**Answer:** D

10. Obesity is caused by an increase in \_\_\_\_\_.

- a. adiposity
- b. epidosity

- c. ediposity
- d. apidosity

**Answer: A**

11. The formula for the body mass index is \_\_\_\_\_.
- a. a person's weight in kilograms squared divided by the square of his/her height in meters ( $\text{kg}^2/\text{m}^2$ )
  - b. a person's weight in kilograms squared divided by his/her height in meters ( $\text{kg}^2/\text{m}$ )
  - c. a person's weight in kilograms divided by his/her height in meters ( $\text{kg}/\text{m}$ )
  - d. a person's weight in kilograms divided by the square of his/her height in meters ( $\text{kg}/\text{m}^2$ )

**Answer: D**

12. Which of the following health communication style makes use of the patient's knowledge and experience?
- a. doctor-centred communication
  - b. patient-centred communication
  - c. practitioner-centred communication
  - d. none of these

**Answer: B**

13. Which of the following charters defined health promotion as 'the process of enabling people to increase control over, and to improve, their health'.
- a. Charter of the United Nations (1945)
  - b. Tokyo Charter (1946)
  - c. Ottawa Charter (1986)
  - d. none of these

**Answer: C**

14. This approach to health promotion aims to improve and promote health by addressing socioeconomic and environmental determinants of health within the community.
- a. behaviour change approach
  - b. community development approach
  - c. biomedical approach
  - d. none of these

**Answer: B**

15. This approach to health promotion is synonymous with health education as it aims to increase individuals' knowledge about the causes of health and illness.
- a. behaviour change approach



- b. community development approach
- c. biomedical approach
- d. none of these

**Answer: A**

16. Which of the following is a characteristic of the community development approach to health promotion?

- a. Improving individual attitudes and beliefs are key to successful health promotion.
- b. There is a close relationship between individual health and its social and material contexts, thus are relevant when developing initiatives for change.
- c. Individuals need to change personal behaviour rather than to change the environment to promote health.
- d. all of these

**Answer: B**

17. Who proposed the biopsychosocial model?

- a. Freud
- b. Sontag
- c. Engel
- d. none of these

**Answer: C**

18. In H.J. Eysenck's twentieth-century theory of personality, how did he reinterpret the classical phlegmatic temperament?

- a. stable extravert
- b. stable introvert
- c. unstable extravert
- d. unstable introvert

**Answer: B**

19. HIV is a retrovirus that infects and colonizes cells in the \_\_\_\_\_.

- a. immune system
- b. immune system and the central nervous system
- c. endocrine system
- d. immune system and endocrine system

**Answer: B**

20. In 2015, the global prevalence of HIV infection was \_\_\_\_\_.

- a. 0.2%

- b. 0.4%
- c. 0.6%
- d. 0.8%

**Answer: D**

21. In \_\_\_\_\_, blood glucose homeostasis ceases to function because the beta cells of the pancreatic islets are destroyed.

- a. type 1 diabetes mellitus
- b. type 2 diabetes mellitus
- c. gestational diabetes
- d. both type 2 diabetes mellitus and gestational diabetes

**Answer: A**

22. Which year did the World Health Organization first express the right to health as a fundamental human right?

- a. 1946
- b. 1952
- c. 1987
- d. 2000

**Answer: A**

23. The influence of families, schools and neighbourhoods in explaining social inequalities in health can be categorised in which of the following systems?

- a. microsystem
- b. mesosystem
- c. exosystem
- d. macrosystem

**Answer: A**

24. Which philosopher was central to the conceptualization of human beings as composed of mind and body?

- a. John Locke
- b. Plato
- c. Rene Descartes
- d. Confucius

**Answer: C**

25. The WHO report in 2013 estimated that tobacco will kill as many as \_\_\_\_\_ people this century if the WHO Framework Convention on Tobacco Control is not implemented rapidly.

- a. 2 billion
- b. 1 billion
- c. half a billion
- d. quarter of a billion

**Answer: B**

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VTU - SFH Notes

## **Module - 2**

VTU - SFH Notes

## Module-2

### **Building of healthy lifestyles for better future:**

Developing a healthy diet for good health, Food and health, Nutritional guidelines for good health and well beingness, Obesity and overweight disorders and its management, Eating disorders - proper exercises for its maintenance (Physical activities for health), Fitness components for health, Wellness and physical function, How to avoid exercise injuries.

VTU - SFH Notes

# Building Healthy Life Style for Better Future

## Developing Healthy Diet for Good Health



- Prepare most of your meals at home using whole or minimally processed foods.
- Choose from a variety of different proteins to keep things interesting.
- Make an eating plan each week.
- Choose recipes with plenty of vegetables and fruit. Your goal is to fill half your plate with vegetables and fruit at every meal.
- Choose brightly colored fruits and vegetables each day, especially orange and dark green vegetables
- Avoid sugary drinks and instead drink water.
- Lower-fat, unsweetened milk is also a good way to stay hydrated.
- Eat smaller meals more often. Eat at least three meals a day with snacks in between.
- When you wait too long to eat you are more likely to make unhealthy food choices.

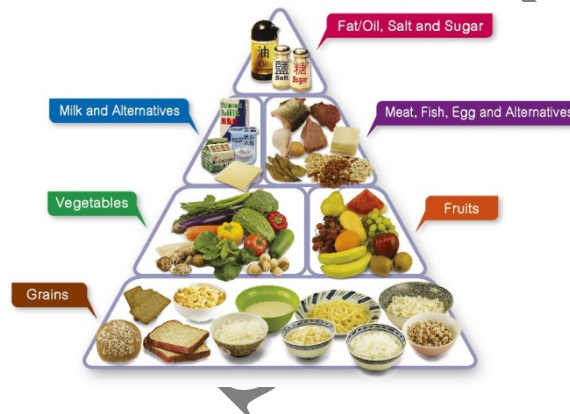
### Healthy Diet

- **Fruit and vegetables:** A wide variety of fruit and vegetables should be eaten and preferably five or more servings should be eaten per day.
- **Bread, pasta, other cereals and potatoes:** Plenty of complex carbohydrate foods should be eaten, preferably those high in fibre.
- **Meat, fish and alternatives:** Moderate amounts of meat, fish and alternatives should be eaten and it is recommended that the low fat varieties are chosen.



- Milk and dairy products: These should be eaten in moderation and the low fat alternatives should be chosen where possible.
- Fatty and sugary foods: Food such as crisps, sweets and sugary drinks should be eaten infrequently and in small amounts.

## Food Pyramid



## Tips - Healthy Diet for Good Health

- Eating lots of vegetables and fruit
  - This is one of the most important diet habits. Vegetables and fruit are packed with nutrients (antioxidants, vitamins, minerals and fibre) and help you maintain a healthy weight by keeping you full longer.
  - Fill half your plate with vegetables and fruit at every meal and snack.
- Choosing whole grain foods
  - Whole grain foods include whole grain bread and crackers, brown or wild rice, quinoa, oatmeal and hulled barley. They are prepared using the entire grain. Whole grain foods have fibre, protein and B vitamins to help you stay healthy and full longer.
  - Choose whole grain options instead of processed or refined grains like white bread and pasta.
  - Fill a quarter of your plate with whole grain foods.
- Eating protein foods - Every day
  - Protein foods include legumes, nuts, seeds, tofu, fortified soy beverage, fish, shellfish, eggs, poultry, lean red meats including wild game, lower fat milk, lower fat yogurts, lower fat kefir and cheeses lower in fat and sodium.

- Protein helps build and maintain bones, muscles and skin.
  - Try to eat at least two servings of fish each week, and choose plant-based foods more often.
  - Dairy products are a great source of protein. Choose lower fat, unflavoured options.
  - Fill a quarter of your plate with protein foods.
  - Limiting highly and ultra-processed foods
- Some minimally processed foods are okay
    - These are foods that are slightly changed in some way but contain few industrially made additives.
    - Minimally processed foods keep almost all of their essential nutrients.
    - Some examples are: bagged salad, frozen vegetables and fruit, eggs, milk, cheese, flour, brown rice, oil and dried herbs.
  - Making water your drink of choice
    - Water supports health and promotes hydration without adding calories to the diet.
    - Sugary drinks including energy drinks, fruit drinks, 100% fruit juice, soft drinks and flavored coffees have lots of sugar and little to no nutritional value. It leads to weight gain.
    - Even though the fruit juice has vitamins and minerals, it has more sugar than the fruit and less fiber. It is not alternative to fruits.
    - When safe drinking water is not available, quench your thirst unsweetened lower-fat milk, and previously boiled water.
  - A healthy diet helps to protect against malnutrition in all its forms, as well as non communicable diseases (NCDs), including such as diabetes, heart disease, stroke and cancer.
  - Unhealthy diet and lack of physical activity are leading global risks to health.
  - Healthy dietary practices start early in life- fosters healthy growth and improves cognitive development, and may have longer term health benefits such as reducing the risk of becoming overweight or obese.
  - Energy intake (calories) should be in balance with energy expenditure.

## Food and Health

### Food

- FOOD is the means that nourishes the body.
- Food may also be defined as any substance eaten or drunk which meets the needs for energy, body building, regulation and protection of the body.
- Food is the material from which our bodies are made.
- Eating right kind of food in right amounts ensures good nutrition and health.

### Nutrition

- Nutrition - is food at work in the body. It includes everything that happens from eating food to its usage in various functions of body.
- Nutrients are components of foods needed for body in adequate amounts for proper growth, reproduction and leading normal life.
- The science of nutrition deals with what nutrients we need, in what quantity, how to get them and how the body utilizes them.
- Adequate, optimum and good nutrition – indicates the right amount and proportion of nutrients for proper utilization for achieving highest level of physical and mental health.



## Nutritional Status

- Nutritional status – state of the body as a result of foods consumed and their utilization by the body. Nutritional status can be good, fair and poor.
- Good nutritional status – characterized by an alert, good natured personality, a well developed body with normal weight for height, well developed and firm muscles, healthy skin, reddish pink colored eyelids and membranes of mouth, good layer of subcutaneous fat, clear eyes, smooth and glossy hair, good appetite and excellent general health which is recognized by stamina to work, regular meal time, sound sleep, normal elimination and resistance to disease.

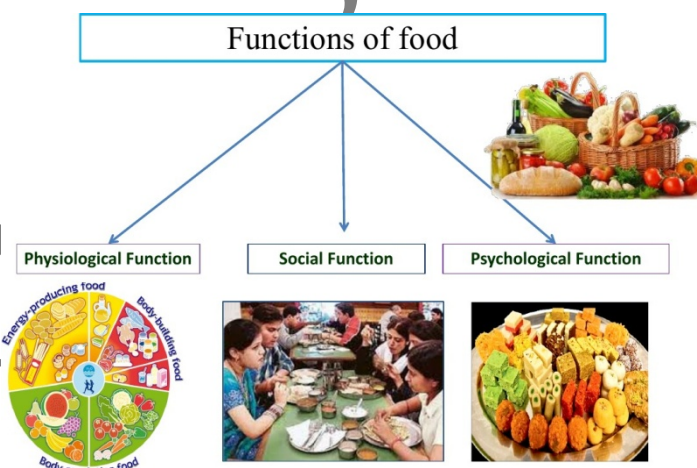
## Malnutrition

- Malnutrition – undesirable kind of nutrition leading to ill health. It results from lack, excess or imbalance of nutrients in the diet. It includes both under and over nutrition. Under nutrition is a state of insufficient supply of essential nutrients.
- Malnutrition can be primarily due under nutrition or secondarily due to error in metabolism. The interaction between nutrients or nutrients and drugs used for treatment.

## Over Nutrition and Diet

- Over nutrition refers to an excessive intake of one or more nutrients which creates a stress on bodily functions.
- Diet – refers to what ever is eaten or drunk each day. It includes normal diet that is consumed either individually or in groups. Diets may be modified for making it suitable for sick individuals as a part of treatment – therapeutic diets

## Functions of Food



## Physiological

- Food provides energy. Body needs energy to sustain involuntary processes essential for continuing life. It is also required for various activities like professional, household and recreational activities.
- Another important function is body building. Food eaten helps to maintain the body structure and helps in repair of worn out tissues

- Food regulates the activities of the body including – heart beat, maintaining body temperature, muscle contraction, water balance, blood clotting and removal of waste products from the body.
- Food helps in improving the immune system and improves resistance power of the body.

### **Social**

- Food has always been the central part of our existence, social cultural and religious life.
- Special foods are distributed during religious functions in homes, temples, churches etc.
- Feasts are given in different stages of life like birth, cradle ceremony, birthdays, marriages etc. many feasts call for feeding specific segment of people.
- Certain menus are associated with specific foods in each region.
- Food has been used as expression of love friendship and social acceptance
- Food is also used to express happiness like success in exams, job, marriages, birth of a baby etc.
- Food for get togethers, meetings or functions should be planned in a proper manner to bring people together.

### **Psychological**

- In addition to physical and social needs, food must satisfy certain emotional needs.
- It includes a sense of security, love and attention.
- Familiar foods usually make us feel secure.
- Sharing of food is a token of friendship and acceptance.
- In a friendly gathering we try unfamiliar foods and thus enlarge our food experiences.
- Anticipating needs and fulfilling these are expressions of love and attention.
- These sentiments are the basis of the normal attachment to mother's cooking or home food.
- If the foods included are unfamiliar or not tasty, then even nutritionally balanced foods may not be satisfactory.
- Planning meals must be such that it is nutritionally adequate and also enjoyable.

## **Nutritional Guidelines for Good Health and Well beingness**

### **Fruits and Vegetables (WHO)**

**Eating at least 400 g, or five portions, of fruit and vegetables per day reduces the risk of NCDs(Non Communicable Diseases) and helps to ensure an adequate daily intake of dietary fiber.**

**Fruit and vegetable intake can be improved by:**

- Always including vegetables in meals;
- Eating fresh fruit and raw vegetables as snacks;
- Eating fresh fruit and vegetables that are in season; and
- Eating a variety of fruit and vegetables.

## Fats (WHO)

**Reducing the amount of total fat intake to less than 30% of total energy intake helps to prevent unhealthy weight gain. The risk of developing NCDs is lowered by :**

- Reducing saturated fats to less than 10% of total energy intake;
- Reducing trans-fats to less than 1% of total energy intake; and
- Replacing both saturated fats and trans-fats with unsaturated fats.

**The Saturated fat and industrially-produced trans-fat intake, can be reduced by:**

- Steaming or boiling instead of frying when cooking.
- Replacing butter and ghee with oils rich in polyunsaturated fats (soybean or sunflower oils).
- Eating reduced-fat dairy foods and lean meats, or trimming visible fat from meat.
- Limiting the consumption of baked and fried foods, and pre-packaged snacks and foods (e.g. doughnuts, cakes, pies, cookies, biscuits and wafers) that contain industrially-produced trans-fats.

## Salts (WHO)

**Most people consume too much sodium through salt around 9–12g per day and not enough potassium (less than 3.5 g). High sodium intake and insufficient potassium intake contribute to high blood pressure, which in turn increases the risk of heart disease and stroke.**

- Salt intake to the recommended level of less than 5 g per day.
- Not having salt or high-sodium sauces and condiments on the table.
- Limiting the consumption of salty snacks.
- Choosing products with lower sodium content.
- People should be encouraged to check nutrition labels to see how much sodium is in a product before purchasing or consuming it.
- Potassium can mitigate the negative effects of elevated sodium consumption on blood pressure. Intake of potassium can be increased by consuming fresh fruit and vegetables.

## Sugars (WHO)

**In both adults and children, the intake of free sugars should be reduced to less than 10% of total energy intake. A reduction to less than 5% of total energy intake would provide additional health benefits**

**Consuming free sugars increases the risk of dental caries (tooth decay). Excess calories from foods and drinks high in free sugars also contribute to unhealthy weight gain, which can lead to overweight and obesity.**

- Limiting the consumption of foods and drinks containing high amounts of sugars, such as sugary snacks, candies and sugar-sweetened beverages (i.e. all types of beverages containing free sugars – these include carbonated or non-carbonated soft drinks, fruit or vegetable juices and drinks, liquid and powder concentrates, flavored water, energy and sports drinks, ready-to-drink tea, ready-to-drink coffee and flavored milk drinks.
- Eating fresh fruit and raw vegetables as snacks instead of sugary snacks.

BMI	Weight Status
Below 18.5	Under Weight
18.5 to 24.9	Normal Weight
25 to 29.9	Over Weight
30 to 35	Obese
Over 35	Morbid Obesity

## Obesity and overweight disorders and its management

Being overweight or obese are both terms for having more body fat than what is considered healthy. These terms are used to identify people who are at risk for health problems from having too much body fat. However, the term "obese" generally means a much higher amount of body fat than "overweight."

The more body fat one has, the greater the risk for diabetes, kidney disease, heart disease, and other medical conditions. The signs of overweight and obesity are

- Very High Body Mass Index (BMI).
- Unhealthy body fat distribution.
- Not enough sleep.
- High amounts of stress.

### Body Mass Index (BMI)

- BMI is calculated from your height and weight.
- International System of Units (SI) :  $BMI = \frac{\text{weight (kg)}}{(\text{height (m)})^2}$
- Imperial System :  $BMI = \frac{\text{weight (lb)}}{(\text{height (inches)})^2} \times 703$

### What causes obesity and overweight?

- The fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended.
- An increased intake of energy-dense foods that are high in fat and sugars.
- An increase in physical inactivity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization.
- Endocrinal abnormalities.

### Complications

- Type 2 diabetes
- High blood pressure
- Heart disease
- Stroke
- Sleep apnea
- Metabolic syndrome
- Fatty liver diseases

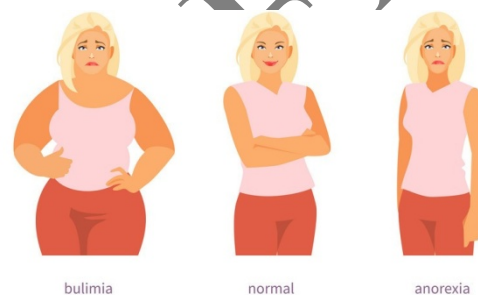
- Osteoarthritis
- Kidney disease
- Gallbladder disease
- Emotional and Social problems

## Treatments

- Healthy eating plan and regular physical activity.
- Weight-management programs : lose weight or keep from regaining lost weight.
- Medication
- Weight-loss devices : Gastric Band, Gastric Balloon Systems, Gastric Emptying Systems.
- Weight-management devices : Oral Removable Palatal Space Occupying Device, Ingested, Transient, Space Occupying Device.
- Bariatric surgery.

## Eating Disorders

*Disorder is An illness that disrupts normal physical or mental functions* Eating disorders are a range of



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**psychological conditions that cause unhealthy eating habits to develop. They might start with an obsession with food, body weight, or body shape. The types of Eating Disorders are**

1. Anorexia Nervosa
2. Bulimia Nervosa
3. Binge eating disorder
4. Pica
5. Rumination disorder
6. Avoidant/restrictive food intake disorder
7. Other disorders: Purging Disorder, Night Eating syndrome

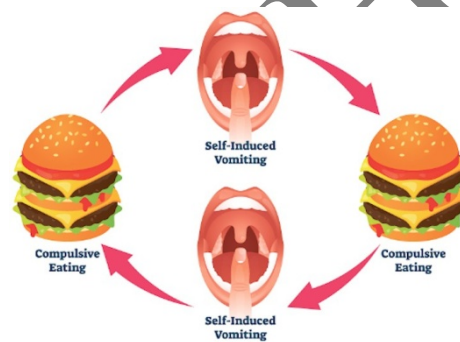
## Anorexia Nervosa

### Common symptoms of anorexia nervosa include

- Being considerably underweight compared with people of similar age and height very restricted eating patterns
- An intense fear of gaining weight or persistent behaviours to avoid gaining weight, despite being underweight
- A relentless pursuit of thinness and unwillingness to maintain a healthy weight
- A heavy influence of body weight or perceived body shape on self-esteem
- A distorted body image, including denial of being seriously underweight
- Serious weight loss: 15% below the normal weight (BMI is  $\leq 17.5$ )
- The weight loss is induced by avoidance of fattening foods.
- Amenorrhea in women and loss of sexual interest in men
- Use excessive exercise or appetite suppressants.

## Bulimia Nervosa

### Common symptoms of Bulimia Nervosa include



- Alternating periods of starvation Use appetite suppressants
- There is a self-perception of being too fat with a fear of too fat.
- Recurrent episodes of overeating in which large amounts of food are consumed in short periods of time.
- Persistent preoccupation with eating, and a strong desire or a sense of compulsion to eat (craving)
- Counteract the “fattening effect” perception by Self-induced vomiting and other Common purging behaviours include fasting, laxatives, diuretics, enemas, and excessive exercise.

## Binge Eating Disorder

### Common symptoms of Binge Eating Disorder

- Eating large amounts of foods rapidly, in secret and until uncomfortably full, despite not feeling hungry
- Persistent preoccupation with eating, and a strong desire or a sense of compulsion to eat (craving)
- Counteract the “fattening effect” perception by Self-induced vomiting and other Common purging behaviours include fasting, laxatives, diuretics, enemas, and excessive exercise.

- feeling a lack of control during episodes of binge eating feelings of distress, such as shame, disgust, or guilt, when thinking about the binge eating behavior
- No use of purging behaviours, such as calorie restriction, vomiting, excessive exercise, or laxative or diuretic use, to compensate for the bingeing

## Pica

### Pica disorder highlights

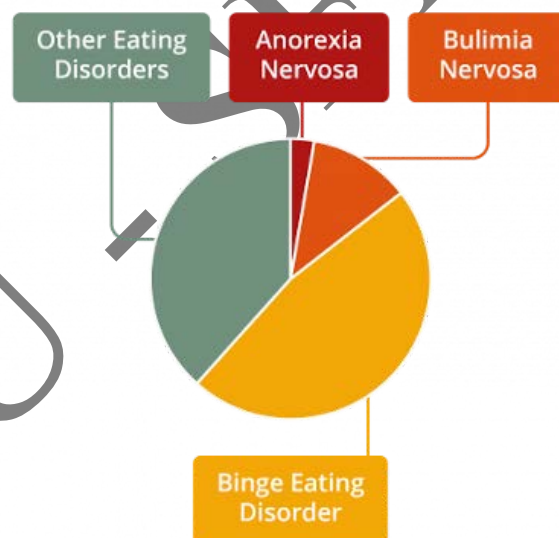
- Pica is another eating disorder that involves eating things that are not considered food.
- Individuals with pica crave non-food substances, such as ice, dirt, soil, chalk, soap, paper, hair, cloth, wool, pebbles, laundry detergent, or cornstarch.
- Pica can occur in adults, as well as children and adolescents. That said, this disorder is most frequently observed in children, pregnant women, and individuals with mental disabilities

## Rumination disorder

### Rumination disorder condition

- Rumination disorder can affect people at all stages of life. People with the condition generally regurgitate the food they've recently swallowed. Then, they chew it again and either swallow it or spit it out.

## Eating Disorders Occurance



### Who suffers from eating disorders?

- Eating disorders are most common in teenagers or young adults, but can also affect almost anyone.
- Higher in females than males (males almost half of females)
- People of all ages, backgrounds, body weights, and ethnicity can be affected by eating disorders.
- Although common in teenage women, men and boys can also be vulnerable.

- People sometimes have eating disorders without their families or friends ever suspecting that they have a problem.
- Aware that their behaviour is abnormal, people with eating disorders may withdraw from social contact, hide their behaviour, and deny that their eating patterns are problematic.

## **Physical activity recommended by WHO Adults 18 to 65 years**

- At least 150 minutes of moderate-intensity physical activity or at least 75 minutes of vigorous-intensity physical activity or an equivalent combination throughout the week.
- Physical activity includes leisure time physical activity (walking, dancing, gardening, hiking, swimming), transportation (e.g. walking or cycling), occupational (work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.
- For additional health benefits, adults should increase their moderate-intensity physical activity to 300 minutes per week, or at least 75 minutes of vigorous-intensity physical activity throughout the week or an equivalent combination of moderate- and vigorous- intensity activity.
- Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.
- Aerobic activity should be performed in bouts of at least 10 minutes duration.

## **Types of Physical Activities**

### **Moderate intensity physical activity**

**Requires a moderate amount of efforts and accelerates the heart rate.**

- Brisk walking
- Dancing
- Gardening
- House work and domestic chores
- Water aerobics
- Bicycling slower than 10 miles per hour
- General building tasks (roofing, thatching, painting)
- Active involvement in games/ sports with children/ walking domestic animals
- Carrying/ moving moderate loads (<20kg)

### **Vigorous-intensity Physical activity**

**Requires a large amount of efforts with rapid breathing and substantial increase in heart rate.**

- Race walking, jogging, or running, Walking/ climbing briskly up a hill
- Fast swimming
- Aerobics
- Fast Bicycling
- Jumping rope
- Heavy gardening (continuous digging)



- Hiking uphill or with a heavy backpack
- Competitive sports and games (traditional games, football, volleyball, hockey, basketball)
- Carrying /shifting heavy loads (>20 kg)

## **Fitness Components of Health**

**A well-balanced exercise activities address all health-related components of fitness.**

1. Body composition : It is the amount of fat mass compared to lean muscle mass, bone and organs.
2. Flexibility: is the ability of each joint to move through the available range of motion for a specific joint.
3. Muscular strength :It is the amount of force a muscle can produce. Examples would be the bench press, leg press or bicep curl.
4. Muscular endurance :It is the ability of the muscles to perform continuous without fatiguing. Example:The sit up test is most often used to test muscular endurance.
5. Cardio-respiratory endurance :It is the ability of the heart and lungs to work together to provide the needed oxygen and fuel to the body during sustained workloads. Examples would be jogging, cycling and swimming, Cooper Run.

## **Wellness and Physical Function**

- Physical function is the ability to perform both basic and instrumental activities of daily living, and the ability of older adults to reside in the community depends to a large extent on their level of physical function.
- Being active helps maintain healthy bones, muscles and joints. Physical activity decreases the risk of some health problems such as heart disease, stroke, diabetes, and high blood pressure. Exercising helps reduce feelings of anxiety and depression, helps prevent and manage stress, and promotes mental well-being.
- Physical wellness is the ability to maintain a healthy quality of life that allows us to get through our daily activities without undue fatigue or physical stress.
- The physical component of wellness involves the ability to carry out daily tasks, develop cardio respiratory and muscular fitness, maintain adequate nutrition and a healthy body fat level, get adequate sleep, and avoid abusing alcohol and other drugs or using tobacco products.

## Module – II MCQ Questions for practice :

### Part : I

1. What is the essential first step to a healthier lifestyle?
  - a. taking more vitamins
  - b. making the decision to be abstinent from street drugs
  - c. exercising regularly to the point of exhaustion
  - d. none of the above
  
2. If you don't cope well with stress, it can:
  - a. increase your susceptibility to infection
  - b. increase your risk for heart disease
  - c. interfere with good decision making
  - d. all of the above
  
3. Even if the cause of what is stressing you is out of your control, you know that:
  - a. you always have control over your response to the stress
  - b. you can protect your health by doing relaxation exercises
  - c. you may be able to redefine it as something you can control
  - d. all of the above
  
4. To prevent food borne illnesses:
  - a. eat only raw meat, fish, and eggs
  - b. eat canned food even if the cans have bulges or dents
  - c. wash everything thoroughly—hands, utensils, cutting boards
  - d. always thaw frozen food at room temperature
  
5. Which of the following statements is included in the FDA Dietary Guidelines?
  - a. choose a variety of fruits and vegetables daily
  - b. choose a variety of grains daily, especially whole grains
  - c. choose a diet low in saturated fat and cholesterol
  - d. all of the above

## Part : II

1. How many minutes should an average person walk a day?

- 30 minutes
- 40 minutes
- 20 minutes

2. An apple a day \_\_\_\_\_

- keeps the doctor away
- keeps all the troubles away
- keeps you awake whole day

3. Which vitamin is good for eyes?

- Vitamin D
- Vitamin K
- Vitamin A

4. What is the recommended daily water intake?

- 0.5 Liters
- 1 Litre
- 2 Liters

5. What are the general sleep requirements for an adult?

- 8 to 12 hours
- 12 to 14 hours
- 7 to 9 hours

6. Why do people have to use bath salts?

- To heal wounds
- To relax and sleep better
- To soften the skin

7. What is usually recommended as a self care tip for depression?

Sleeping for less than 7 hours

Active lifestyle

Eating 100 extra calories

8. How do puzzles help you?

They help you learn numbers

They help exercise the brain

They are a time pass

9. When must you brush your teeth if you brush them only once a day?

Right after dinner

At night before you sleep

In the morning

10. How often you must have a routine body checkup?

Once in 10 years

Once a year

Once in 5 years



VTU

## Module 3

VTU - SFHN Notes

### **Module-3**

#### **Creation of Healthy and caring relationships :**

**Building communication skills (Listening and speaking), Friends and friendship - education, the value of relationships and communication, Relationships for Better or worsening of life, understanding of basic instincts of life (more than a biology), Changing health behaviours through social engineering,**

VTU - SFH Notes

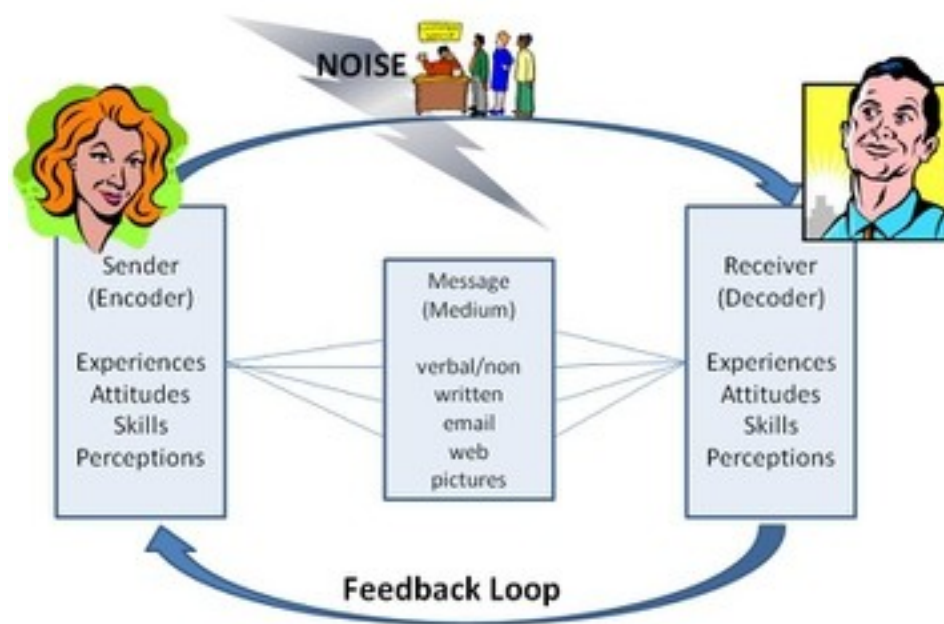
# Creation of Healthy and caring relationships

## Building communication skills (Listening and speaking)

### Communication and its essence



- Communication is the art of transmitting information, ideas and attitudes from one person to another.
- Communication is the process of meaningful interaction among human beings.
- Personal process
- Occurs between people
- Involves change in behavior
- Means to Influence others
- Expression of thoughts and emotions through words and actions.
- Tool for controlling and motivating people.
- It is a social and emotional process.



## The Communication Process

### Communication Skills

- **Sender:** The person who conceptualized the idea and wants it delivered to the recipient.
- **Encoding:** The way the information is described or translated into a message.
- **Message:** The idea, fact or opinion that the sender wants to communicate.
- **Communication channel:** The method of delivering the message.
- **Noise or Distraction:** Hinders successful communication. *Types : Psychological, Physical, Environmental and Semantic.*
- **Receiver:** The target audience of the message.
- **Decoding:** The interpretation of the message.
- **Feedback:** The response or action a receiver takes after decoding a message.

### Goals of Communication

- To inform – you are providing information for use in decision making
- To persuade – to reinforce or change a belief about a topic
- To build relationships – some messages that you send may have the goal of building good will between you and the other person.
- For Perfect/Effective - Communication





### Barriers of Communication

- No interest in the conversation.
- Jumping to conclusions without waiting for the whole message.
- Inability to Listen to Others.
- Lack of Transparency & Trust.
- Communication Styles (when they differ).
- Fear of offending the other person by expressing your opinions.
- Cultural Differences & Language.
- One feels not comfortable sharing your feelings with the other person

### Types of Barriers

1. Psychological Barriers
2. Physical Barriers
3. Emotional Barriers
4. Attitudinal Barriers
5. Cultural Barriers
6. Language Barriers
7. Gender Barriers
8. Interpersonal Barriers

## How to improve Communication

- Understanding is the KEY to communication.
- Understanding requires ACTIVE LISTENING.
- Speak up about your thoughts and ideas
- Try not to make assumptions
- Practice self-awareness, especially during tough conversations
- Don't be accusatory when raising an issue
- Be brief and clear
- Eye Contact

## Friends and friendship - education

### Friend

**"a person with whom one has a bond of mutual affection, typically one exclusive of sexual or family relations"**

- A person who has a strong liking for and trust in another person.
- A person who is not an enemy friend or foe.
- A person who helps or supports something.
- Unconditional Relationship.

### Friendship

**"Friendship is a relationship of mutual affection between people. It is a stronger form of interpersonal bond than an acquaintance or an association, such as a classmate, neighbour, or colleague. "**

- It is a dyadic relationship, meaning that it involves a series of interactions between two individuals known to each other.
- It is recognized by both members of the relationship and is characterized by a bond or tie of reciprocated affection.
- It is not obligatory; two individuals choose to form a friendship with each other.

### Characteristics of Friendship

- It is typically egalitarian (all are equal) in nature. Each individual in a friendship has about the same amount of power or authority in the relationship.
- It is almost always characterized by companionship and shared activities.
- One of the primary goals and motivations of friendship is companionship.
- In addition, adolescent and adult friendships often perform other functions, such as serving as sources of emotional support and providing opportunities for self-disclosure and intimacy.

## Qualities Of A True Friend

- A faithful friend is a sure anchor
- Will always be honest with you.
- Loves you for yourself and unconditional
- Gives more than they take
- Compromises
- forgives you even without an apology.
- believe in you.
- Make time for you.
- Respectful to you.
- Thoughtful.
- Stick around you.

## The Nature of Friendship

- Bellah et. al. (1996) suggest that the classical idea (Aristotle) of friendship has three components: 'Friends must enjoy each other's company, they must be useful to one another, and they must share a common commitment to the good'.
- Bell and Coleman 1999 : According to this view 'friendship becomes a special relationship between two equal individuals involved in a uniquely constituted dyad'.
- Pahl 2000 :Friendship is a relationship built upon the whole person and aims at a psychological intimacy, which in this limited form makes it, in practice, a rare phenomenon, even though it may be more widely desired. It is a relationship based on freedom and is, at the same time, a guarantor of freedom.

## Friendship in Education

- They provide support and resources and can both encourage and discourage academic achievement.
- Contribute to a positive sense of mental well-being,
- Encourage learning and develop interpersonal skills
- play a significant role in promoting overall health.
- Development of Social Skills
- Better Cooperation
- Better Problem solving abilities
- Better Communication
- Better Academic outcomes

## Why communication is key to healthy relationships

- Communication is important in any relationship, as it allows you to effectively share feelings, opinions and expectations.
- **GET TO KNOW EACH OTHER** : The key to determining whether you're compatible with another person is to communicate with them from the offset.
- **AVOID MISUNDERSTANDING** : Another reason to communicate effectively is to avoid any misunderstandings, which can lead to a breakdown of communication or the relationship as a whole.
- **SET CLEAR EXPECTATIONS** : In any relationship, it's important that these expectations are made clear from the offset, to avoid one party upsetting the other without realizing. Always be open and honest and never be afraid to stand by what you believe in. Thus healthy, positive and satisfying relationship.

## How to improve communication in a relationship?

- Always talk about important or sensitive issues face-to-face.
- Be open and honest.
- Find the right time for important conversations. Don't be abusive or verbally aggressive, even if it's an emotive issue.
- Approach conversations in a calm and relaxed way, in a quiet environment where both parties are comfortable.
- Use positive body language.
- Do not communicate via text.
- Choose your language carefully.

## The value of relationships and communication

### Examples of Bad communication in relationships

- Belittling each other
- Openly giving the cold shoulder
- Becoming defensive in heated discussions
- Assuming you know what the other person is thinking
- Arguments that are never resolved and brushed under the carpet
- Inability to compromise
- Few attempts to connect

### Examples of good communication in relationships

- Giving your partner, friend or family member your full attention.
- Giving each other space when needed.
- Face-to-face communication.
- Honesty and openness.
- 24- hour rule – never sleep on an argument.
- Talk about the little things in life.

### Relationships for Better or worsening of life

- Satisfying relationships not only make us happy, they also influence our long-term health as much as getting enough sleep, eating healthy, and not smoking.
- Many research studies have shown that satisfying relationships are associated with better health, greater happiness, and even longer life.
- Stronger Heart and Healthier Brain
- An unhealthy relationship will cause lot of stress, loneliness and will make us an irritable person which will work as a retarding force in our way of achieving success.
- While in an unhealthy relationship we lose trust on each other and respect for each other decreases.
- A research shows that a healthy relationship have 5 to 1 ratio of positive to negative behaviours and a unhealthy relationship have a much lower ratio of positive to negative behaviours.

### Understanding of basic instincts of life (more than a biology)

#### Three Basis instincts of Human Life

- Self-Preservance
- Sexual Instinct
- Social Instinct.



### Self-Preservance

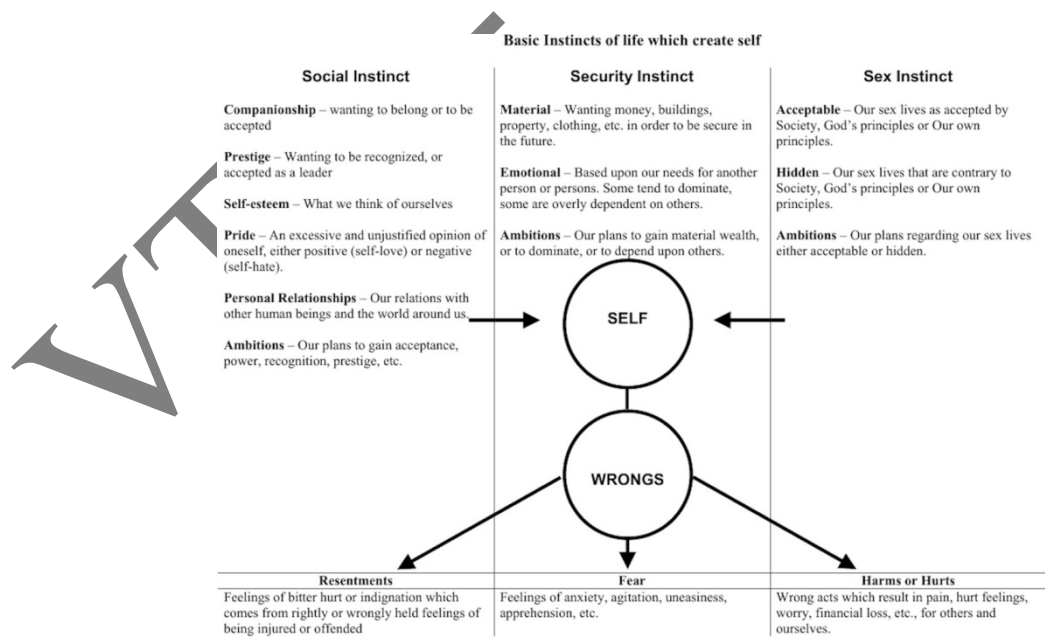
- Self-Preservance : Focused on enhancing and protecting personal safety, security, and comfort.
- Priorities: Physical well-being, financial security, mental health
- Characteristics: This type tends to be self-sufficient, disciplined, and devoted to self-improvement. Example: Investing in the future.
- Weaknesses: An unbalanced self-preservation instinct can lead to a preoccupation with financial and other forms of security and an obsessive relationship with diet and exercise.

### Sexual Instinct

- Sexual Instinct : Sexual instinct is the drive to extend into the environment and through generations to come.
- Priorities: Intimacy, connection, excitement
- Characteristics: The instinct drives them to create truly intimate connections with those they love and to connect with love itself.
- Weaknesses: Sexual types practice an exploratory approach to life that can lead to a lack of focus, as well as neediness and promiscuity.

### Social Instinct

- Social Instinct : Focused on creating and maintaining relationships to build a sense of personal value, accomplishment, and community.
- Priorities: Interpersonal relationships, group participation.
- Characteristics: Healthy social types typically maintain many friendships, feel a strong sense of social responsibility, and work to protect the group.
- Weaknesses: Social types may develop an antisocial “us against them” attitude in an effort to determine who’s on their side.



## Changing health behaviors through social engineering

### Role of social engineering in health behavior changes

- Social engineering involves modifying the environment in ways that effect people's ability to practice a particular health behaviour.
- Much behaviour change occurs not through behaviour change programs but through social engineering.
- These measures are called passive because they do not require an individual to take personal action.

### Examples for Social Engineering

- Wearing seat belts is an active measure that an individual must take to control possible injury from an automobile accident, whereas airbags, which inflate automatically on impact, represent a passive measure..
- Banning the use of certain drugs, such as heroin and cocaine, and regulating the disposal of toxic wastes are examples of health measure that have been mandated by legislation.
- Both smoking and alcohol consumption are legally restricted to particular circumstances and age groups.
- Social engineering solutions include providing purified water to people.
- Legislations can be passed to make the environment healthier and help people lead more healthy lives.
- The media can be used to influence people towards making healthier choices especially children who are suggestible and vulnerable to advertising.
- Information resources on health can be made available to all.
- Facilitating development of health habits such as open spaces and parks that encourage people to exercise, relatively cheap organic fruits and vegetables, minimal marketing of tobacco and alcohol.

## Module 2 and Module 3 Quiz Questions (MCQ) Pattern

1. Communication is a part of \_\_\_\_\_ Skill
  - a) Soft
  - b) Rough
  - c) Hard
  - d) Technical
2. Basic Instincts of human life
  - a) All
  - b) Self Preservance
  - c) Social
  - d) Sexual
3. Types of Addictive Behaviour
  - a) Video Gaming
  - b) All
  - c) Alcoholism
  - d) Drug Abuse
4. Which of the following food and nutrients helps to fight against diseases
  - a) Fats
  - b) Meaat
  - c) Fruits
  - d) Sugars
5. Which of the following is not a Communication Skill
  - a) Confindence
  - b) Listening
  - c) Feedback
  - d) Arguing
6. Friendship
  - a) Dyadic
  - b) Egalitarian
  - c) Both a and b
  - d) None
7. Barriers of Communication
  - a) Inabililty to listen to others
  - b) Jumping to conclusions
  - c) Cultural Differences
  - d) All
8. Which of the following is not an Obesity and Overweight complications
  - a) Plague
  - b) Type 2 Diabetes
  - c) Heart Diseses
  - d) Sleep Apnea
9. Eating Disorders
  - a) Bulimia Nerevosa



- b) Binge Eating Disorder
- c) Anorexia Nervosa
- d) All

10. BMI stands for

- a) Body Mass Index
- b) Body Mass Indicator
- c) Body Material Index
- d) None



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# Module-4

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## Module-4

### **Avoiding risks and harmful habits :**

Characteristics of health compromising behaviors, Recognizing and avoiding of addictions, How addiction develops and addictive behaviors, Types of addictions, influencing factors for addictions, Differences between addictive people and non addictive people and their behavior with society, Effects and health hazards from addictions Such as..., how to recovery from addictions.

# Avoiding risks and Harmful Habits

## Characteristics of health compromising behaviors



**behaviours that undermine or harm current or future health. Habitual in nature leading to addiction in certain cases. Substantial contributors to global burden of disease.**

- Produce pleasurable effects: sensory pleasure – alliesthesia (external stimulus perceived as pleasant if maintains or improves internal homeostasis, perceived as unpleasant if threatens internal homeostasis).
- Thrill-seeking behaviour.
- Stress reduction, coping mechanisms: avoidance – negative reinforcement.
- Acquired gradually over time: degree of engagement & experimentation
- Developmental state seen as window of vulnerability, risk-taking behaviour.
- Problematic family relationships.
- Developed Gradually.

## Recognizing and avoiding of addictions

### Recognizing and avoiding of Additions

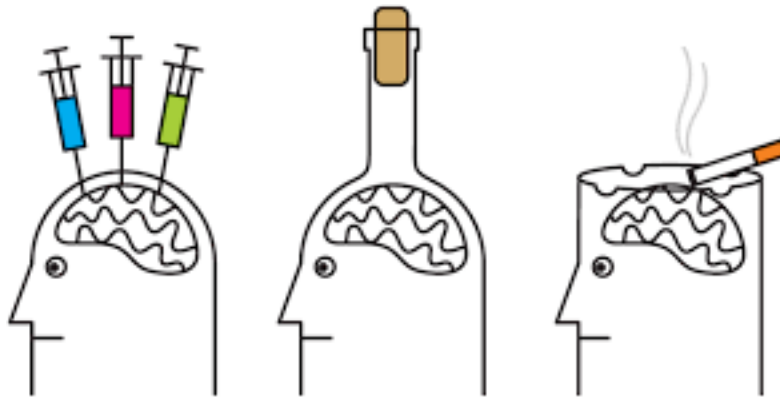
- Someone with an addiction will crave a substance or other behavioral habits. They'll often ignore other areas of life to fulfill or support their desires.



- Lack of control, or inability to stay away from a substance or behavior
- Decreased socialization, like abandoning commitments or ignoring relationships
- Ignoring risk factors, like sharing needles despite potential consequences
- Physical effects, like withdrawal symptoms or needing higher dosage for effect
- Problems at school or work — frequently missing school or work, a sudden disinterest in school activities or work, or a drop in grades or work performance.
- Physical health issues — lack of energy and motivation, weight loss or gain, or red eyes Neglected appearance — lack of interest in clothing, grooming or looks.
- Changes in behavior — exaggerated efforts to bar family members from entering his or her room or being secretive about where he or she goes with friends, or drastic changes in behavior and in relationships with family and friends.
- Money issues — sudden requests for money without a reasonable explanation; or your discovery that money is missing or has been stolen or that items have disappeared from your home, indicating maybe they're being sold to support drug use.

### Recovering from addictions

- Admit There Is A Problem. The hardest part to recovery is admitting you have an addiction.
- Reflect On Your Addiction.
- Seek Professional Support.
- Appreciate The Benefits of Sobriety.
- Evidence-Based Care.
- Identify Your Triggers.
- Change Your Environment.
- Exercise.



## Addiction is Mental Disorder

### How addiction develops and addictive behaviours

#### Substance Use Disorder

- Substance use disorder (SUD) is a complex condition in which there is uncontrolled use of a substance, despite harmful consequences.
- People with SUD have an intense focus on using a
- certain substance(s) such as alcohol, tobacco, or illicit drugs, to the point where the person's ability to function in day to day life becomes impaired.
- People keep using the substance even when they know it is causing or will cause problems.
- The most severe SUDs are sometimes called addictions.

## Types of addictions and influencing factors for addictions

### Addictions

#### What is Addiction?

- Addictive behaviour: A behaviour based on the pathological need for the substance or activity, may involve the abuse of substances, such as alcohol or tobacco/opium or the excessive ingestion of high caloric food, resulting in extreme obesity
- Addiction is a chronic disorder with biological, psychological, social and environmental factors influencing its development and maintenance.
- Addiction occurs when the act of using a substance takes over these circuits and increases the urge to consume more and more of the substance in order to achieve the same rewarding effect.

### Types of Addictions

- Alcoholism/Tobacco
- Drugs-Opium, Marijuana, Cocaine, Cannabis
- Internet/browsing addiction
- Cell phone addiction



- Video gaming
- Pornography
- Sedatives/Anxiolytics/inhalants
- Hyper obesity/Morbid obesity



### More about Addiction

- About half the risk for addiction is genetic
- Genes affect the degree of reward that individuals experience when initially using a substance (e.g., drugs) or engaging in certain behaviours (e.g., gambling), as well as the way the body processes alcohol or other drugs.
- Heightened desire to re-experience use of the substance or behaviour, potentially influenced by psychological (e.g., stress, history of trauma), social (e.g., family or friends & use of a substance), and environmental factors (e.g., accessibility of a substance, low cost) can lead to regular use/exposure, with chronic use/exposure leading to brain changes
- All addictions are part of mental disorders!

### Reasons for taking drugs

- To feel good — feeling of pleasure, “high” or “intoxication”. Euphoria
- To feel better — relieve stress, forget problems, or feel numb
- To do better — improve performance or thinking
- Curiosity and peer pressure or experimenting





### Symptoms of substance use disorder

- Impaired control: a craving or strong urge to use the substance; desire or failed attempts to cut down or control substance use
- Social problems: substance use causes failure to complete major tasks at work, school or home; social, work or leisure activities are given up or cut back because of substance use
- Risky use: substance is used in risky settings; continued use despite known problems
- Drug effects: Dependence: Involves physiological need for substance; tolerance (need for larger amounts to get the same effect); withdrawal symptoms (different for each substance);
- Feeling that you have to use the drug regularly — daily or even several times a day.
- Having intense urges for the drug that block out any other thoughts.
- Over time, needing more of the drug to get the same effect.
- Failing in your attempts to stop using the drug.
- Taking larger amounts of the drug over a longer period of time than you intended
- Making certain that you maintain a supply of the drug Spending money on the drug, even though you can't afford it.
- Not meeting obligations and work responsibilities, or cutting back on social or recreational activities because of drug use.
- Continuing to use the drug, even though you know
- it's causing problems in your life or causing you physical or psychological harm.
- Doing things to get the drug that you normally wouldn't do, such as stealing.
- Driving or doing other risky activities when you're under the influence of the drug.

- Spending a good deal of time getting the drug, using the drug or recovering from the effects of the drug.
- Experiencing withdrawal symptoms. when you attempt to stop taking the drug.

### Consequences

- Brain changes include alterations in cortical (pre-frontal cortex) and sub-cortical (limbic system) regions involving the neuro-circuitry of reward, motivation, memory, impulse control and judgment.
- This can lead to dramatic increases in cravings for a drug or activity, as well as impairments in the ability to successfully regulate this impulse, despite the knowledge and experience of many consequences related to the addictive behaviour.

### Complications

- Getting a communicable disease.
- Other health problems. Drug addiction can lead to a range of both short-term and long-term mental and physical health problems. These depend on what drug is taken.
- While driving more likely do other dangerous activities while under the influence causing accidents.
- People who are addicted to drugs die by suicide.
- Family problems . Behavioral changes may cause marital or family conflict.
- Work issues. Decline in performance at work, absenteeism and eventual loss of employment.
- Problems at school. Academic performance and motivation to excel in school.
- Legal issues. While buying or possessing illegal drugs, stealing to support the drug addiction, driving while under the influence of drugs or alcohol.
- Financial problems.

### Differences between addictive people and non addictive people and their behavior with society

Risk Factors	Protective Factors
<i>Aggressive behavior in childhood</i>	<i>Good self-control</i>
<i>Lack of parental supervision</i>	<i>Parental monitoring and support</i>
<i>Poor social skills</i>	<i>Positive relationships</i>
<i>Drug experimentation</i>	<i>Academic competence</i>
<i>Availability of drugs at school</i>	<i>School anti-drug policies</i>
<i>Community poverty</i>	<i>Neighborhood pride</i>

### What other factors increase the risk of addiction?

- Early use: Although taking drugs at any age can lead to addiction, research shows that the earlier people begin to use drugs, the more likely they are to develop serious problems.
- This may be due to the harmful effect that drugs can have on the developing brain.
- It also may result from a mix of early social and biological risk factors, including lack of a stable home or family, exposure to physical or sexual abuse, genes, or mental illness.

### How to recover from addictions

#### Treating Substance Use Disorders (SUDs)

- The first step is recognition of the problem
- A formal assessment of symptoms: Medical professional
- Multiple types of treatment: A combination of medication and individual or group therapy is most effective.
- Treatment approaches that address an individual's specific situation and any co-occurring medical, psychiatric, and social problems is optimal for leading to sustained recovery.
- Varies depending on substance and circumstances Treating substance use disorder is challenging and includes one or more of the following:
  - Acute detoxification,
  - Prevention and management of withdrawal
  - Cessation (or rarely, reduction) of use
  - Maintenance of abstinence

#### What works

- Cognitive-behavioural therapy: CBT can help addicted patients overcome substance abuse by teaching them to recognize and avoid destructive thoughts and behaviours.
- Motivational interviewing: This therapy technique involves structured conversations that help patients increase their motivation to overcome substance abuse.
- Contingency management. Provide tangible incentives to encourage patients to stay off drugs
- Psychodrama and group therapies
- Alcoholic Anonymous and Narcotic anonymous
- Rehab centers and Therapeutic Communities and other tertiary care centers

#### 13 principles of effective drug addiction treatment

- Addiction is a complex, but treatable, disease that affects brain function and behavior
- No single treatment is appropriate for everyone.
- Treatment needs to be readily available.
- Effective treatment attends to multiple needs of the individual, not just his or her drug abuse.
- Remaining in treatment for an adequate period of time is critical.
- Counselling: individual and/or group —and other behavioral therapies are the most commonly used forms of drug abuse treatment.

- Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.
- An individual's treatment and services plan must be assessed continually and modified as necessary to ensure it meets his or her changing needs.
- Many drug-addicted individuals also have other mental disorders.
- Medically assisted detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse.
- Treatment does not need to be voluntary to be effective.
- Drug use during treatment must be monitored continuously, as lapses during treatment do occur.
- Treatment programs should assess patients for the presence of HIV/AIDS, hepatitis B and C, tuberculosis and other infectious diseases, as well as provide targeted risk-reduction counseling to help patients modify or change behaviors that place them at risk of contracting or spreading infectious diseases.

## **Effects and health hazards from addictions Such as...**

### **Health Hazards**

- Health issues: Cardiovascular, digestive and renal impairment, strokes, HIV/Aids, Cancer, Hepatitis B and C, Lungs, Fetal Alcohol Syndromes, etc.
- Mental health issues: Anxiety, depression, Schizophrenias, organic mental disorders due to substance abuse, cognitive dysfunction, personality disorder, etc
- Social health issues: Stigma, disrupted families, anti-social behaviours, higher crime records and law & order problems.

## Module 4 Quiz Questions for Practice in MCQ Pattern

Which of the following is NOT a characteristic of addiction?

- a) Negative consequences
- b) Loss of control
- c) Habitual behavior
- d) Denial

Which term describes the use of a drug for a purpose for which it was not intended?

- a) Abuse
- b) Tolerance
- c) Addiction
- d) Misuse

An individual who knowingly tries to protect an addict from natural consequences of his or her destructive behavior is

- a) enabling.
- b) intervening.
- c) encouraging.
- d) Sheltering.

Addiction involves an excessive

- a) amount of debt or financial problems.
- b) risk of losing one's job or failing out of school.
- c) preoccupation with the addictive behavior.
- d) tolerance for alcohol or drugs.

Denial is a person's

- a) inability to perceive that a behavior is self-destructive.
- b) experience of a blackout episode or memory loss.
- c) failure to stop an addictive behavior.
- d) change in the usual pattern of drinking or drug use.

When increased amounts of a drug, other substance, or behavior is needed to produce the desired effect, this phenomenon is known as

- a) psychological dependence.
- b) physiological dependence.
- c) tolerance.
- d) withdrawal.

Excessive use of any drug (legal or illegal) constitutes

- a) drug abuse.
- b) drug addiction.
- c) drug misuse.
- d) drug tolerance.

Temporary physical and psychological symptoms that occur when use of an addictive substance is discontinued is

- a) compulsion.
- b) relapse.
- c) withdrawal.
- d) addiction.
- e)

Process addictions include all of the following EXCEPT

- a) the use of Ritalin to help concentration when studying.
- b) compulsive buying, both in stores and online.
- c) exercise addiction to the point of working out at least 3 hours a day.
- d) compulsive gambling that results in the need to borrow money.

Charlotte, a college student, is a habitual drinker. She has become preoccupied with obtaining alcohol and obsessed with her need to drink. Charlotte is exhibiting

- a) lack of responsibility.
- b) tolerance.
- c) denial.
- d) compulsion.

Rebecca takes medications for various conditions, including Prinivil (for high blood pressure), insulin (for diabetes), and Claritin (for allergy symptoms). This is an example of

- a) synergism.
- b) cross-tolerance.
- c) antagonism.
- d) polydrug use.

Chemicals that relay messages (impulses) from one nerve cell to another or to other cells are

- a) chemoreceptors.
- b) enzymes.
- c) neurotransmitters.
- d) synapses.

Which of the following is NOT an example of drug misuse?

- a) Not following the instructions when taking a prescription medication
- b) Taking an over-the-counter medication more often than is recommended
- c) Regular use of increasing amounts of cocaine to get high
- d) Taking a friend's prescription medication to treat a migraine

A lack of judgment regarding whether a particular substance or behavior will be healthy or damaging to oneself is known as

- a) obsession.
- b) loss of control.
- c) denial.
- d) compulsion.

Which of the following is classified as a stimulant?

- a) Methamphetamine
- b) Marijuana
- c) Alcohol
- d) LSD

Signs of compulsive buying include

1. purchasing several gifts when they go on sale.
2. repeatedly buying more than you need or can afford.
3. purchasing only one item in your favorite color.
4. showing new clothes to your friends or family when you bring them home.

Transdermal drug administration means that a drug is

- a) absorbed through the skin.
- b) inhaled.
- c) injected into a vein.
- d) placed under the tongue.

Drugs in suppository form are absorbed into the bloodstream through the

- a) rectal or vaginal walls.
- b) alveoli.
- c) stomach lining.
- d) intestinal walls.

The psychoactive drug mescaline is obtained from which plant?

- a) Peyote cactus
- b) Marijuana
- c) Mushrooms
- d) Poppy

The illicit drug most commonly used in the United States is

- a) amphetamines.
- b) marijuana.
- c) cocaine.
- d) heroin.

Which of the following statements about cocaine is NOT true?

- a) A cheap and widely available form of cocaine that can be smoked is known as crack.
- b) It is a powerful stimulant.
- c) When snorted, it can damage the mucous membranes.
- d) It can cause drowsiness, depression, and loss of appetite.

Which of the following statements about amphetamines is true?

- a) They are stimulants.
- b) They have no known side effects.
- c) They are not addictive.
- d) They can cause a dangerous drop in heart rate and respiratory rate.

The most noticeable effect of THC, the psychoactive substance in marijuana, is

- a) slouching posture.
- b) bloodshot eyes.
- c) hyperactivity.
- d) loss of appetite.

Morphine, codeine, and heroin have what in common?

- a) They are all opioids.
- b) They are all amphetamines.
- c) They are illegal in the United States.
- d) They are all available without a prescription.

PCP was originally developed as

- a) an experimental psychiatric medication.
- b) an anesthetic with which a person remains conscious but feels no pain.
- c) a drug to induce vomiting.
- d) an anesthetic used in veterinary practice



# MODULE - V

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# MODULE – V

## Module-5

### **Preventing and fighting against diseases for good health :**

Process of infections and reasons for it, How to protect from different types of transmitted infections such as...., Current trends of socio economic impact of reducing your risk of disease, How to reduce risks for good health, Reducing risks and coping with chronic conditions, Management of chronic illness for Quality of life, Health and Wellness of youth: a challenge for the upcoming future Measuring of health and wealth status.

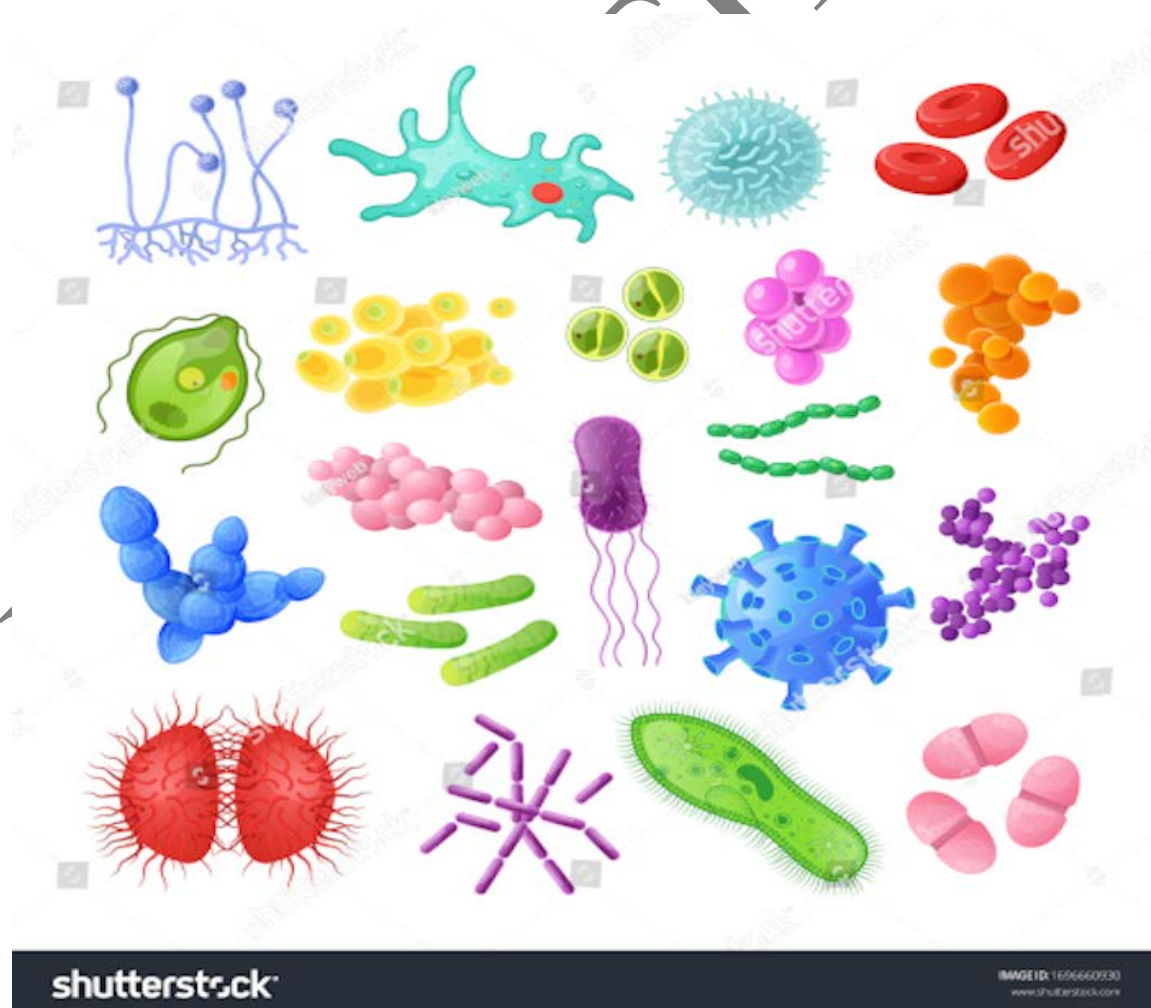
# Preventing and fighting against diseases for good health :

## Content

- 1) Management of chronic illness for better quality of life
- 2) Health and Wellness of Youth- a challenge for upcoming future
- 3) Measuring of health and wellness

Process of Infections and the Reasons for it:

Disease Vs Illness:



Prepared by Dr. L THIMMESHA & Dr. K S Mahesh Lohith

According to this way of thinking, disease is something that needs to be cured, such as infection, injury, toxic exposure, cell degeneration, etc.

Illness is something that needs to be managed such as feelings of pain, discomfort, distress, weakness, fatigue, etc.

## Germ according to CDC (CENTER FOR DISEASE CONTROL AND PREVENTION)

Germ is a part of everyday life and is found in our air, soil, water, and in and on our bodies. Some germs

are helpful, others are harmful. Many germs live in and on our bodies without causing harm and some even help us to stay healthy. Only a small portion of germs are known to cause infection.

- An infection occurs when germs enter the body, increase in number, and cause a reaction of the body.
- Three things are necessary for an infection to occur:
  1. Source: Places where infectious agents (germs) live (e.g., sinks, surfaces, human skin)
  2. Susceptible Person with a way for germs to enter the body.
  3. Transmission: a way germs are moved to the susceptible person.

## Sources of Infections

A Source is an infectious agent or germ and refers to a virus, bacteria, or other microbe. In healthcare settings, germs are found in many places. People are one source of germs including:

- Patients
- Healthcare workers
- Visitors and household members

People can be sick with symptoms of an infection or colonized with germs (not have symptoms of an infection but able to pass the germs to others).

Germ is also found in the healthcare environment. Examples of environmental sources of germs



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## Reasons for Infection from Sources

1. Dry surfaces in patient care areas (e.g., bed rails, medical equipment, countertops, and tables)
2. Wet surfaces, moist environments, and biofilms (e.g., cooling towers, faucets and sinks, and equipment such as ventilators)
3. Indwelling medical devices (e.g., catheters and IV lines)
4. Dust or decaying debris (e.g., construction dust or wet materials from water leaks)

## Susceptible People for infections

A susceptible person is someone who is not vaccinated or otherwise immune, or a person with a weakened immune system who has a way for the germs to enter the body. For an infection to occur, germs must enter a susceptible person's body and invade tissues, multiply, and cause a reaction.

- Patients in healthcare who have underlying medical conditions such as diabetes, cancer, and organ transplantation are at increased risk for infection because often these illnesses decrease the immune system's ability to fight infection.
- Certain medications used to treat medical conditions, such as antibiotics, steroids, and certain cancer fighting medications increase the risk of some types of infections.
- Lifesaving medical treatments and procedures used in healthcare such as urinary catheters, tubes, and surgery increase the risk of infection by providing additional ways that germs can enter the body.

## Transmission of infection

Transmission refers to the way germs are moved to the susceptible person. Germs don't move themselves. Germs depend on people, the environment, and/or medical equipment to move in healthcare settings.

- Contact moves germs by touch. Touching the eye, nose, mouth or wounds after contact.
- Sprays and splashes occur when an infected person coughs or sneezes, creating droplets which carry germs short distances (within approximately 6 feet). These germs can land on a susceptible person's eyes, nose, or mouth and can cause infection (example: pertussis or meningitis).
- Inhalation occurs when germs are aerosolized in tiny particles that survive on air currents over great distances and time and reach a susceptible person. (example: Nontuberculous mycobacteria or aspergillus).
- Sharps injuries can lead to infections (example: HIV, HBV, HCV) when bloodborne pathogens enter a person through a skin puncture by a used needle or sharp instrument.

## Types of Infections



Bacterium



Virus



Protozoan



Fungus



Helminth

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## Infectious agents come in many shapes and sizes. Categories include

- **Bacteria** : Bacteria are one-celled organisms that can be seen only with a microscope. Strep throat, Tuberculosis, Urinary tract infections

- **Viruses**: Viruses are much smaller than cells. AIDS Common cold, Ebola, Genital herpes, Influenza, Measles Chickenpox and shingles, Corona virus disease 2019 (COVID-19)

- **Fungi** There are many varieties of fungi, and people eat several of them.

- **Protozoans**: Protozoans are single-celled organisms that behave like tiny animals — hunting and gathering

other microbes for food. There are many varieties of fungi, and people eat several of them. Giardiasis, Malaria, Toxoplasmosis

- **Helminths** : Helminths are among the larger parasites. Tapeworms and Roundworms.

## How to protect from different types of transmitted infections

Preventing infections and avoid spreading infections through simple tactics:

- Avoid close contact with people who are sick.
- Cover coughs and sneezes.
- Avoid touching your face.
- Stay home if you're sick.
- Clean and disinfect surfaces that are touched often.
- Avoid contaminated food and water.
- Prevent contaminated medical equipments.
- Avoiding the contact with the body fluids of infected.
- Hand-washing, Medicines and Vaccines.
- Prevent infections by sexual transmission

## Current trends of socio-economic impact of reducing your risk of disease

- Reducing inconvenience as well as economic costs appropriate utilization of all healthcare professionals and lay experts, as well as physicians.
- Reducing inappropriate and costly use of resources such as antibiotics and specialist time;
- Engagement of the public and providers in national dialogue about risk benefit decision making, prioritization of use resources, and a focus on prevention rather than cure.
- Support economic evaluation of NCD programs, such as the HEARTS approach external icon for CVD prevention in primary care
- Increase scientific research on the economics of NCDs
- Create tools to evaluate NCD costs
- Train global partners on economic analysis and evaluation
- Use evidence to inform NCD strategy development
- Low socioeconomic status has significant consistent impact on mortality and morbidity.

## How to reduce risks for good health

- Be a non-smoker and avoid second hand smoke. If one smokes need to get help to quit.
- Be physically active everyday.
- Eat healthy foods.
- Achieve a healthy weight.
- Control your blood pressure.
- Limit your intake of alcohol.
- Reduce your stress.
- Be screened or tested regularly.

- Practice Hygiene.
- Remain Social

## Reducing risks and coping with chronic conditions

### Chronic illness

- What is chronic disease/illness?
- Chronic diseases are defined broadly as conditions that last for one year or more and require ongoing medical attention, as well as limit activities of daily living.
- Example: heart disease, cancer, diabetes
- They are also leading drivers of the nation's large scale health care costs.
- Based on the latest data from C D C (centre for disease control), 10 most expensive chronic diseases are:
  - Cardio vascular diseases
  - Smoking related health issues
  - Alcohol related health issues
  - Diabetes
  - Alzheimer's disease
  - Cancer
  - Obesity
  - Arthritis
  - Asthma
  - Stoke
- At any given time 50% of the population has a chronic condition.
- The medical management of chronic disorders accounts for three quarters nation's health spending excluding nursing home care.



- The chronically sick account for 90% of home care visits
- 83% of prescription drug use
- 80% of the days spent in hospitals
- 66% of doctors visit
- 55% of visits to hospital emergency rooms
- These conditions are not confined to the elderly. More than one third young adults of ages 18 to 44 have at least one chronic disability.
- At time each one of us will hear a physician say that our condition is chronic and cannot be cured. It can be managed.

## Additional demands of chronic illness

- As well as needing to find ways to deal with the stress involved with chronic illness, you also need to:
  - Understand the condition
  - Know about the treatment and therapy
  - Maintain trust and confidence in the doctors,
  - Especially when recovery isn't possible
  - Know how to control the symptoms
  - Maintain social relationships and a strong
  - Support network when faced with an uncertain
  - Medical future or when symptoms arise
  - Avoid social isolation.

## Management of chronic illness for Quality of life



### Quality of life

- “Quality of life is defined as an individual's perception of their position in life in the context of the culture and value systems, in which they live and in relation to their goals, expectations, and standards”.
- (Standard indicators of life: wealth, employment, the environment, physical and mental health, education, recreational and leisure time, social belonging, religious beliefs, safety, security and freedom)
- Simply quality of life means the degree to which an individual is healthy, comfortable, and able to participate in or enjoy life events.
- Quality of life has a wide range of contexts. It includes the field of international development, health care, politics and employment

- Quality of life has several components: Specifically, physical functioning, psychological status, disease or treatment, related symptomatology
- Health related quality of life is an evaluation of quality of life and its relationship with health. In this field quality of life is often regarded in terms of how certain ailment affects a patient on an individual level.
- Until recently quality of life was not considered an issue of psychological importance.
- For many years it was measured only in terms of length of survival and signs of presence of disease
- In addition there was no consideration of the psychological consequence of illness and treatment.

## Components of quality of life

Quality of life has several components. Specifically,

- Physical functioning
- Psychological status
- Social functioning
- Disease or treatment

## Assessment of quality of life in chronic illness

- Till now the assessment of the quality of life of chronically ill was based on how much the disease and treatment interferes with the activities of daily living such as
  - Sleeping,
  - Eating,
  - Going to work and
  - Engaging in recreational activities

- For patients with more advanced diseases, such assessments include whether the patient is able to bathe, dress, use toilet, be mobile, be content, and eat without assistance
- Essentially the quality of life assessment gauge the extent to which a patient' normal life activities have been compromised by disease and treatment

## Why we should study quality of life of chronically ill?

- Studying chronically ill patients and their quality of life is important for the following
- Documentation of exactly how illness affects vocational, social, and personal activities. This provides an important basis for interventions designed to improve quality of life.
- Quality of life measures can help pinpoint which problems are likely to emerge for patients with diseases. Example: such measure might indicate that sexual functioning is a problem for a patient. Such information would be helpful in anticipating the intervention that are required
- Quality of life measures also assess the impact of treatments on quality of life of the chronically ill
- Quality of life information can be used to compare therapies and their outcome
- Quality of life information can inform decision makers about care that will maximize long term survival with the highest quality of life possible
- Information enables policy makers to compare the impact of different chronic diseases on health care costs and to assess the cost effectiveness of different interventions
- A chronic health condition is any condition lasting six months or longer. Example: asthma, arthritis, cancer, obesity, diabetes, chronic pain or heart diseases
- Modern day treatments have made provision for people with chronic condition to live longer with diseases that previously led to premature death.

## What causes chronic illness and associate conditions?

- They are caused by a number of different health factors resulting at simultaneously
- They take some time to develop
- They last for a long time and often lead to other health problems

## How to maintain better quality of life in the chronically ill?

- Chronic conditions are not cured completely. So looking after our self about good medical advice, living healthy life style, and having positive attitude help in maintaining better quality of life

The measures adopted are:

- Finding reliable information about diseases, its treatment and management. This will help the chronically ill patient to feel that he/she in taking positive step and give a feeling of control over their illness
- Understanding the medication. This includes what it is specifically for. It provides special instruction to be followed in taking medicine/ treatment and potential side effects
- Setting the patient's goal- short term goals will give a sense of how the person is progressing
- Developing skills to manage the chronically ill patient's pain and fatigue
- Getting emotional support. Speaking to others who are going through what the patient is going through, and leaning on family and friends when there is need
- Planning for the future
- Here are 10 helpful strategies for coping with a chronic condition.
- Get a prescription for information.
- Make your doctor a partner in care.

- Build a team.
- Coordinate your care.
- Make a healthy investment in yourself.
- Make it a family affair.
- Manage your medications.
- Beware of depression.
- Reach out. (Doctors, nurses)
- Plan for end-of-life decisions.

#### Pain management:

- Taking pain relieving medicine. Medication includes both non-prescription medication and prescription medication
- Under going physical therapies. There are many non-drug treatments. A combination of treatments and therapies (Physio therapy) is some time more effective. Non drug therapies include cognitive behavioral therapy (cognitive behavioral therapy changes how a person thinks and in turn how he feels and behave).
- Physical therapies also are found in stretching exercises, walking and other exercises
- Relaxation and stress management techniques
- Transcutaneous electrical stimulation therapies
- Applying heat packs and cold packs and
- Acupuncture

#### Taking care of mental health:

- Symptoms of chronic diseases – tiredness, aches and pains are not quite often visible. It is not just physical symptoms that affect a chronically ill. They can affect the limits on life styles and living with constant pain, it can impact mentally too.
- Worrying or thinking negatively adds to the patient's anxiety or stress. They can affect the overall health

What are the ways to reduce worrying?

- Write down the concerns and the possible consequences even if they are negative
- Find out the information about prognosis
- Talking to a friend, a supporting group or seek specialist help
- Focusing on a variety of things each day

Health and Wellness of youth:



## A challenge for the upcoming

- Youth is the time of life when one is young and often means the time between

childhood and adulthood.

- It is also defined as “the appearance, freshness, vigor, spirit, etc.,
- Its definitions of a specific age range varies, as youth is not defined chronologically

as a stage that can be tied to specific age ranges, nor can its end point be linked to specific activities

## Good life style choices for better quality of life

- Maintain a healthy life style can help the chronically ill patient to feel well, while living with chronic illness and its condition. This includes eating well, doing as much physical activity as the patient’s condition will allow, and getting good rest
- Trying to do some physical activity each day, even if it is only a small amount, can help with managing pain and lift your mood. Speak with the doctor or physiotherapist about exercise that may help.

Sleep is also very important if there is a health condition



## Dealing with multiple health condition

- To achieve this chronically ill person need to deal with a number of health care professionals. The most important thing to remember about seeing multiple healthcare professionals is to let each one know who else the patient are seeing and for what health condition.



## Getting support from others for better quality of life

- Social support can help chronically ill person to maintain a good quality of life.
- When a chronically ill person has a long term adverse health condition the person must plan to catch up with family and friends and inform about their condition and let them know how they can help
- Consider new sources of support such as support groups, clubs, interest group and volunteer opportunities.



## Health and wellness of youth: a challenge for upcoming future

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Notes

## Health and wellness of youth: a challenge for upcoming future

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## Health and wellness

- Health is a state of well-being
- Wellness is the state of living a healthy life styles
- Health refers to physical, mental and social well-being
- Wellness aims to enhance well-being. It can affect physical, mental and social well-being

Notes

## Health and wellness in youth

- High levels of health and wellness in youth help them flourish in life as well as act as a protective factor against some of the challenges that may arise during this period.
- Youth with strong mental well-being are able to manage their emotions, enjoy positive relationships with friends and family



## Challenges facing youth

- In May 2014 WHO published a major report called "Health for the world's adolescent."
- The report analyses what is known about adolescents' health
- It includes topic of what promotes or undermines it, gaps in policies and services, and draws together guidance and recommendations

Notes

## FACTS

- An estimated 1.3 million adolescents died in 2012, mostly from preventable or treatable causes.
- Road traffic injuries were the leading cause of death in 2012, with some 330 adolescents dying every day.
- Other main causes of adolescent deaths include HIV, suicide, lower respiratory infections and interpersonal violence.
- Globally, there were 49 births per 1000 girls aged 15 to 19, according to 2010 figures.
- Half of all mental health disorders in adulthood appear to start by age 14, but most cases are undetected and untreated



- Around 1 in 6 persons in the world is an adolescent: that is 1.2 billion people aged 10 to 19
- Most are healthy, but there is still significant death, illness and diseases among adolescents. Illnesses can hinder their ability to grow and develop to their full potential. Alcohol or tobacco use, lack of physical activity, unprotected sex and/or exposure to violence can jeopardize not only their current health, but often their health for years to come.

Notes

- Promoting healthy practices during adolescence, and taking steps to better protect young people from health risks are critical for the prevention of health problems in adulthood, and for countries' future health and social infrastructure



## Main health issue- Early pregnancy and childbirth

- Complications linked to pregnancy and childbirth are the second cause of death for 15-19-year-old girls globally.
- One of the Millennium Development Goals, is to achieve universal access to reproductive health, for which one of the indicators is the pregnancy rate among the 15 to 19 age group.

Notes

## HIV

- More than 2 million adolescents are living with HIV. Although the overall number of HIV-related deaths is down 30% since the peak 8 years ago, estimates suggest that HIV deaths among adolescents are rising
- A second goal of the Millennium Development is to halt the spread of HIV/AIDS



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Notes

## Other infectious diseases

- Improved childhood vaccination has resulted in reducing death and disability from measles
- However diarrhea, lower respiratory tract infections and meningitis are among the top 10 causes of death for 10 to 19 year olds.



## Mental health

- Depression is the top cause of illness and disability among adolescents and suicide is the third cause of death. Violence, poverty, humiliation and feeling devalued can increase the risk of developing mental health problems.
- Building life skills in children and adolescents and providing them with psychosocial support in schools and other community settings can help promote good mental health. Programmes to help strengthen ties between adolescents and their families are also important. If problems arise, they should be detected and managed by competent and caring health workers.

Notes

## Violence

- Violence is a leading cause of death. An estimated 180 adolescents die every day as a result of interpersonal violence. Around 1 of every 3 deaths among adolescent males in the low- and middle-income countries is due to violence
- Globally, some 30% of girls aged 15 to 19 experience violence by a partner.





- Promoting nurturing relationships between parents and children early in life, providing training in life skills, and reducing access to alcohol and firearms can help to prevent violence. Effective and empathetic care for adolescent survivors of violence and ongoing support can help deal with the physical and the psychological consequences

Notes

## Alcohol and drugs

- Harmful drinking among adolescents is a major concern in many countries. It reduces self-control and increases risky behaviours, such as unsafe sex. It is a primary cause of injuries (including those due to road traffic accidents), violence (especially by a partner) and premature deaths. It also can lead to health problems in later life and affect life expectancy



- Setting a minimum age for buying and consuming alcohol and regulating how alcoholic drinks are targeted at the younger market are among the strategies for reducing harmful drinking. Drug use among 15 to 19 year olds is also a concern.

Notes

## Injuries

- Unintentional injuries are a leading cause of death and disability among adolescents. In 2012, some 120 000 adolescents died as a result of road traffic accidents.
- Young drivers need advice on driving safely
- laws that prohibit driving under the influence of alcohol and drugs need to be strictly enforced. Blood alcohol levels need to be set lower for teenage drivers.
- Graduated licenses for novice drivers with zero-tolerance for drink-driving are recommended



## Malnutrition and obesity

Many boys and girls in developing countries enter adolescence undernourished, making them more vulnerable to disease and early death.

The number of adolescents who are overweight or obese is increasing in both low- and high-income countries.

Notes

## Exercise and nutrition

- Available survey data indicate that fewer than 1 in every 4 adolescents meets the recommended guidelines for physical activity – 60 minutes of moderate to vigorous physical activity daily.
- Anemia resulting from a lack of iron affects girls and boys, and is the third cause of years lost to death and disability. Iron and folic acid supplements help to promote health before adolescents become parents.



- Developing healthy eating and exercise habits at this age are foundations for good health in adulthood. Reducing the marketing of foods high in saturated fats, trans-fatty acids, free sugars, or salt and providing access to healthy foods and opportunities to engage in physical activity are important for all but especially children and adolescents.

Notes

## Tobacco use

- The vast majority of people using tobacco today began when they were adolescents. Prohibiting the sale of tobacco products to minors and increasing the price of tobacco products through higher taxes, banning tobacco advertising and ensuring smoke-free environments are crucial. Globally, at least 1 in 10 younger adolescents (aged 13 to 15) uses tobacco, although there are areas where this figure is much higher. Cigarette smoking seems to be decreasing among younger adolescents in some high-income countries



## Rights of youth

- The rights of children to survive, grow and develop are enshrined in international legal documents. The Committee on the Rights of the Child (CRC), which oversees the child rights convention, in 2013 published guidelines on the right of children and adolescents to the enjoyment of the highest attainable standard of health
- In 2003, the CRC issued guidelines on states' obligations to recognize the special health and development needs and rights of adolescents and young people. The Convention on the Elimination of Discrimination Against Women (CEDAW) also sets out the rights of women and girls to health and adequate health care.

Notes



## Health status

A general term for the state of health of an individual, group, or population measured against defined standards

The W H O definition (2009):

The state of health of a person or population assessed with reference to morbidity, impairments, anthropological measurements, mortality, and indicators of functional status and quality of life.

The WHO health indicators provide internationally accepted standards for various aspects of health status

Notes

- WHO guides health policy in its Member States toward priority health problems, the use of solutions known to them, and relevant directions for problem-orientated research to improve the effectiveness and efficiency of investment for health development.



## Types of health status

–includes

- 1) functional health
- 2) disability days
- 3) activity limitation
- 4) health expectancy and
- 5) disability free life expectancy

Notes

What is the best predictor of health status?

Earlier rising income and subsequent improved standards of living were thought to be the most important factors contributing to a long and healthy life

New research has shown that the level of education a person has is a much better predictor of life expectancy



## Measures of health status

- An individual's health status is usually measured by a health professional
- Measurement of population health status is carried using statistics and data presented as a set of measurement or indicators. It includes:
  - Life expectancy; health adjusted life expectancy; morbidity; under-five mortality; burden of disease; disability adjusted life year; incidence; and prevalence

Notes

## Wealth Status

- What Is Wealth?  
Wealth measures the value of all the assets of worth owned by a person, community, company, or country. Wealth is determined by taking the total market value of all physical and intangible assets owned, then subtracting all debts. Essentially, wealth is the accumulation of scarce resources.





- Specific people, organizations, and nations are said to be wealthy when they are able to accumulate many valuable resources or goods.
- Wealth can be contrasted to income in that wealth is a stock and income is a flow, and it can be seen in either absolute or relative terms.

Notes

#### Understanding Wealth

- Wealth can be expressed in a variety of ways. In a purely material sense, wealth consists of all the real resources under one's control. Financially, net worth is the most common expression of wealth.
- Definitions and measures of wealth have been different over time among societies. In modern society, money is the most common means of measuring wealth. Measuring wealth in terms of money is an example of money's function as a unit of account.



## How to Measure Wealth

- Measuring wealth in terms of money overcomes the problem of evaluating wealth in the form of different kinds of goods. These values can then be added or subtracted together. This, in turn, permits the convenient use of net worth as a measure of wealth. Net worth is equal to assets minus liabilities. For businesses, net worth is also known as shareholders' equity or book value. In common sense terms, net worth expresses wealth as all the real resources under one's control, excluding those that ultimately belong to someone else.
- Research has consistently shown that people's perception of their own wellbeing and happiness depends much more on their estimates of wealth relative to other people than on absolute wealth. This is also part of why the concept of wealth is usually applied only to scarce economic goods; goods that are abundant and free for everyone provide no basis for relative comparisons across individuals.

Notes



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Notes



# Model Question Paper-I with effect from 2021

## (CBCS Scheme)

**First Semester Common to all BE, B.Tech, B.Plan, B.Arch, Bsc,  
Degree Examination**

**Subject Title : Scientific Foundation of Health**

**Subject Code : 21SFH19 / 29**

Examination: **One Hour**

Maximum Marks:**50**

### **Instructions to the candidates**

- i) Answer all the 50 questions, each question carries one mark.
- ii) Marking two answers for the same question makes the answer invalid.

**Choose the correct option from those given in each of the sentences below.**

1) **A mentally sick person has**

- (A) Tendency to get upset with change of routine
- (B) Feeling of friendship and trust for all
- (C) Tendency to perform all the daily chores by oneself
- (D) Tendency to solve all the problems without aid of others

2) **A person is mentally sick if one is**

- (A) Worried
- (B) With moods fluctuating between depression and elation
- (C) Excessively happy
- (D) Extra talkative

Q.3) **Community health aims**

- (A) Care of the infants old
- (B) Care of infirms

- (C) Improvement of health of all
- (D) Improvement of health of children

Q.4) Overweight in BMI is

- a) >30
- b) >25
- c) <25
- d) <30

5) Causes of Obesity and Overweight

- a) Energy imbalance
- b) Energy balance
- c) Energy imbalance between calories consumed and calories expended
- d) None of the above

Q.6) Is addiction a

- a) Mental disorder
- b) Physical disorder
- c) Both (a) & (b)
- d) None of the above

7). What are the reasons for taking drugs?

- a) To feel good
- b) To feel better
- c) To do better
- d) All of the above

Q.8) What states can do to avoid addiction

- a) Adding higher tax on sweetened beverages
- b) Benefits for organic fruits
- c) Availability of healthy food
- d) All of the above

Q.9) Social health hazards includes

- a) Stigma
- b) Anti social behavior
- c) Higher crime records
- d) All of the above

Q.10) What other factors increase the risk of addiction?

- a) Mental illness
- b) Early use
- c) Both (a) and (b)
- d) None of the above

Q.11) Why do some people become addicted to drugs, while others do not?

- a) Aggressive behavior in childhood
- b) Parental monitoring
- c) Neighborhood
- d) All of the above

Q.12) What is protective factors for addictions

- a) Positive relationship b) Drug experimentation c) Community poverty d) All of the above

Q.13) Types of addictive behaviour

- a) Alcoholism b) Drugs-Opium c) Video gaming d) All of the above

Q.14) Mental health hazards includes

- a) Anxiety b) Depression c) Organic mental disorders due to substance use d) All of the above

Q.15) How is substance use disorder treated? a) Multiple types of treatment b) Recognition of problem c) Alcohol drinking d) Both a and b

Q.16) Hyper obesity value in terms of BMI

- a) >25 b) <25 c) >40 d) <40

17) In the future, which of the following will play a vital role in helping the gaming industry demystify the nuances of gambling problems?

- a) sustainability b) a code of conduct c) internet gaming d) experienced recreational gamblers

Q.18) Researchers, mental health professionals, problem gambling organizations, and the casino industry have a responsibility to the problem gamblers themselves to

- a) avoid bickering unnecessarily.
- b) unite with a common goal of reducing the costs associated with gambling.
- c) reach a consensus.
- d) avoid unnecessary bickering and unite with the common goal of reducing the costs associated with gambling only.

Q.19) What is the definition of overweight?

- a) BMI > 25 kg/m<sup>2</sup>
- b) BMI = 25 kg/m<sup>2</sup>
- c) BMI 25-29.9 kg/m<sup>2</sup>
- d) BMI 25-30 kg/m<sup>2</sup>

Q.20) Which of the following diseases does obesity increase the risk of developing?

- a) Type 2 diabetes
- b) Cancer
- c) Cardiovascular disease
- d) None of the above

Q.21) Which of these factors is not required for communication growth?

- a) Growth in size of organizations
- b) Negative atmosphere
- c) Globalisation
- d) Public relations

Q.22) Communication is a part of ----- skills

- a) Soft
- b) Hard
- c) Rough
- d) Short

Q.23) Communication barriers involves

- a) Jumping into the conclusion
- b) Arguing and debating
- c) Fear of offending
- d) All of the above

Q.24) Ways to improve the communication skills are a) Active listening skills, b) Passive listening skills c) Both a & b d) None of the above

Q.25) Goals of communication are

- a) To inform, to persuade
- b) To inform, Fear of offending
- c) To persuade, Fear of offending
- d) None of the above

Q.26) Objectives of communication skills are

- a) Active listening skills
- b) Aware of own communication barrier
- c) Both a and b
- d) None of the above

Q.27) What are the steps to increase the vocal clarity a) Keep your language simple b) Slow down during conversation c) Feedback d) Both a and b

Q.28) How one can improve the communicate skills

a) Listen with willingness b) Respond appropriately c) Provide feedback d) All of the above

Q.29) Body language plays an important role in

a) Communication b) Judgment c) Both a and b d) None of the above

Q.30) Consumption of this causes increase in the fat synthesis, dilation of blood vessels, low blood sugar and stomach-inflammation

(a) drug addiction and tobacco (b) alcohol (c) tobacco (d) drug addiction

Q.31) This causes tunnel vision

(a) Smoking (b) Alcohol (c) Barbiturates (d) Vitamin A deficiency

Q.32) After drinking alcohol, consumption of this leads to death

(a) Morphine (b) Opium (c) Barbiturate (d) All of these

Q.33) Constituent of alcoholic beverage is

(a) Propyl alcohol (b) Methyl alcohol (c) Ethyl alcohol (d) Mix of all of these

Q.34) This is a consequence of alcohol addiction

(a) psychosis, hypertension and fatty liver syndrome

(b) cardiovascular diseases, hypertension and fatty liver syndrome

(c) ulcers, all types of mental illness, vitamin deficiency, cardiovascular diseases

(d) all of these

Q.35) This causes the maximum accumulation of fat in the liver

(a) meat and egg (b) alcohol (c) saturated fat (d) starch

Q.36) What is defined to be a regular and excessive use of a substance in spite of dangers?

a) Use b) Abuse c) Substance d) Dependence

Q.37) What is defined to be a condition in which a person develops intense cravings for the substance and the inability to control their behaviors in regards to obtaining and using it?

a) Use b) Abuse c) Substance d) Dependence



Q.38) What is the goal of social engineering?

- a) Sabotage a person's social media
- b) To gain vital personal information
- c) To catfish someone
- d) To build trust

Q.39) Using abbreviations in communication leads to which type of communication barrier

- a) Language/ Linguistic
- b) Physical
- c) Cultural
- d) Organizational

Q.40) which can be used to overcome the communication barrier

- a) Using a translator
- b) By writing a letter
- c) Not communicating at all
- d) Using your own language

41) What is health?

- a) Physical wellbeing
- b) Mental Wellbeing
- c) Social Wellbeing
- d) All of the above

42) Important roles of health are

- a) Fighting diseases
- b) Feeling happy
- c) Enjoy life
- d) All of the above

43) As per WHO health is defined as a state of complete

- a) physical wellbeing
- b) Mental wellbeing
- c) Social wellbeing
- d) Physical, Mental and social Wellbeing

44) Wellness is

- a) Positive approach
- b) Negative approach
- c) Positive or Negative approach
- d) Positive and Negative approach

45) Risk factors that increase a person's illness or injury due to

- a) Smoking
- b) Extreme physical activity
- c) Alcohol drinking
- d) All of the above

4.6) Wellness dimensions are

a)4 b)2

c)6 d)8

47)Physical wellness includes

a)Enhancing sedentary lifestyle b)Avoiding sedentary lifestyle

c)Creativity d)None of the above

48)Intellectual wellness includes

a)Eating balanced diet

b)Drinking sufficient water

c)Having good nutrition

d)Mental exercise

49) Symptoms of substance use disorder is

a)Impaired control

b)Social Problems

c)Risky use

d)All of the above

50)Emotional wellbeing includes

a)Stress situation management

b)Smoking

c)Drinking alcohol

d)None of the above



# Model Question Paper-II with effect from 2021 (CBCS Scheme)

**First Semester Common to all BE, B.Tech, B.Plan, B.Arch, BSc,  
Degree Examination**

**Subject Title : Scientific Foundation of Health**

**Subject Code : 21SFH19 / 29**

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Maximum Marks: **50**

**Instructions to the candidates**

- i) Answer all the 50 questions, each question carries one mark.
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**Choose the correct option from those given in each of the sentences below.**

**1) Which of the following statements is correct?**

- a. Health promotion can refer to any event, process or activity that facilitates the protection or improvement of the health status of individuals, groups, communities or populations.
- b. The objective of health promotion is to prolong life and to improve quality of life.
- c. Health promotion practice is often shaped by how health is conceptualized.
- d. all of these

**2) This approach to health promotion is synonymous with health education as it aims to increase individuals' knowledge about the causes of health and illness.**

- a. behaviour change approach
- b. community development approach
- c. biomedical approach
- d. none of these

**3) Signs of mental illness are**

- (A) Abnormal changes in thinking, perception and judgement
- (B) Abnormal changes in feeling and memory
- (C) Both A and B
- (D) Abnormal changes in behaviour towards others

**4) Psychosis is characterised by**

- (A) Loss of touch with reality
- (B) Prolonged emotional reaction to a given stress
- (C) Anxiety, fear, sadness, vague aches and pains
- (D) All the above

**5) The percentage of population suffering from serious mental illness is**

- a) 1%
- b) 5%
- C) 8%
- d) 10%

**6) A thrust area in community health is**

- (A) Prevention and control of communicable diseases
- (B) Prevention of blindness
- (C) Maternal and child health
- (D) School health services

**7) People suffering from mental diseases in India number**

- a) 1 – 1.5 million
- b) 6 – 7 million
- c) 10 – 15 million
- d) 60 – 70 million

**8) What states can do to avoid addiction**

- a) Adding higher tax on sweetened beverages
- b) Benefits for organic fruits
- c) Availability of healthy food

d) All of the above

9) Social health hazards includes

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- b) By writing a letter
- c) Not communicating at all
- d) Using your own language

**41) Community health aims at**

- a) Better health and family planning
- b) Better hygiene and clean environment
- c) Removing communicable diseases
- d) All the above

42) Obesity occurs due to:

- a) more consumption of calorie
- b) more consumption of protein
- c) more consumption of vitamins
- d) None

43) Which are intimately related?

- a) Disease and health
- b) Body and health
- c) Body and mind
- d) Body and spiritual values

44) Mental health is a state of development of one's

- a) Personality
- b) Emotional attitude
- c) Both A and B
- d) Intellect

45) Planning refers to

- a) Communities in which they live in
- b) Health services

- c) Financial stability
- d) None of the above

46) WHO principles includes

- a) Development of child
- b) Health is one of the fundamental right
- c) Promotion and protection of health
- d) All of the above

47) Types of health

- a) Mental health only b) Physical health only
- c) Mental and physical health d) None of the above

48). Financial health refers to

- a) Physical activity b) Mental illness
- c) Good income d) None of the above

49) Spiritual health refers

- a) Meditation b) Exercising
- c) Body composition d) All of the above

50) What influence your health

- a)Heredity b)Enyironment
- c)Physical environment d)All of the above

50) Is addiction a

- a)Mental disorder
- b)Physical disorder
- c)Both (a) & (b)
- d)None of the above



# Assessment Test Questions for Practice

## with Key answers

### Section : 1

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1. Which of the following statements is correct?

- e. Evidence from a variety of social surveys has confirmed the increasingly sedentary lifestyle of modern society.
- f. In 2008, the most common form of occupational and non-occupational physical activity in England was walking.
- g. The most common barriers to doing more physical activity identified by adults in England were work commitments and a lack of leisure time.
- h. all of these

**Answer: D**

2. Which of the following diseases have been associated with sedentary lifestyle?

- e. colon cancer
- f. stroke
- g. cardiovascular disease
- h. all of these

**Answer: D**

3. Environmental psychologists emphasize the importance of taking which of the following into consideration when examining behaviour?

- e. genetics
- f. brain structure
- g. physical and social context
- h. none of these

**Answer: C**

4. Which of the following models propose that behaviour, such as physical activity and exercise, is

predicted by intention to engage in such behaviour, which in turn is predicted by the individual's attitude towards exercise and the perceived social norm?

- e. health belief model
- f. theory of reasoned action
- g. transtheoretical model
- h. none of these

**Answer: B**

5. Health compromising behaviors are commonly seen in **Answer:**people from

- A. high class
- B. middle class
- C. low class
- D. none of these

**Answer:**C. low class

6. Alcohol consumption has been linked to

- A. liver cirrhosis
- B. high blood pressure
- C. stroke
- D. all of the above

**Answer:** D. all of the above

7. When findings are difficult to generalize to the world outside of the laboratory, we say the research is lacking in \_\_\_\_\_ validity.

- e. ecological
- f. economical
- g. empirical
- h. experimental

**Answer: A**

8. More research is necessary to confirm the assumption that \_\_\_\_\_ cause positive changes to quality of life.

- e. lifestyle changes
- f. research findings
- g. survey data
- h. questionnaire responses

**Answer: A**

9. Which of the following processes are important in explaining obesity?

- e. food environment
- f. physical activity
- g. individual psychology
- h. all of these

**Answer: D**

10. Obesity is caused by an increase in \_\_\_\_\_.

- e. adiposity
- f. epidosity
- g. ediposity
- h. apidosity

**Answer: A**

11. The formula for the body mass index is \_\_\_\_\_.

- e. a person's weight in kilograms squared divided by the square of his/her height in meters ( $\text{kg}^2/\text{m}^2$ )
- f. a person's weight in kilograms squared divided by his/her height in meters ( $\text{kg}^2/\text{m}$ )
- g. a person's weight in kilograms divided by his/her height in meters ( $\text{kg}/\text{m}$ )
- h. a person's weight in kilograms divided by the square of his/her height in meters ( $\text{kg}/\text{m}^2$ )

**Answer: D**

12. Which of the following health communication style makes use of the patient's knowledge and experience?

- e. doctor-centred communication
- f. patient-centred communication
- g. practitioner-centred communication
- h. none of these

**Answer: B**

13. Which of the following charters defined health promotion as 'the process of enabling people to increase control over, and to improve, their health'.

- e. Charter of the United Nations (1945)
- f. Tokyo Charter (1946)
- g. Ottawa Charter (1986)
- h. none of these

**Answer: C**

14. This approach to health promotion aims to improve and promote health by addressing

socioeconomic and environmental determinants of health within the community.

- e. behaviour change approach
- f. community development approach
- g. biomedical approach
- h. none of these

**Answer: B**

15. This approach to health promotion is synonymous with health education as it aims to increase individuals' knowledge about the causes of health and illness.

- e. behaviour change approach
- f. community development approach
- g. biomedical approach
- h. none of these

**Answer: A**

16. Which of the following is a characteristic of the community development approach to health promotion?

- e. Improving individual attitudes and beliefs are key to successful health promotion.
- f. There is a close relationship between individual health and its social and material contexts, thus are relevant when developing initiatives for change.
- g. Individuals need to change personal behaviour rather than to change the environment to promote health.
- h. all of these

**Answer: B**

17. Who proposed the biopsychosocial model?

- e. Freud
- f. Sontag
- g. Engel
- h. none of these

**Answer: C**

18. In H.J. Eysenck's twentieth-century theory of personality, how did he reinterpret the classical phlegmatic temperament?

- e. stable extravert
- f. stable introvert
- g. unstable extravert
- h. unstable introvert

**Answer: B**

19. HIV is a retrovirus that infects and colonizes cells in the \_\_\_\_\_.

- e. immune system
- f. immune system and the central nervous system
- g. endocrine system
- h. immune system and endocrine system

**Answer: B**

20. In 2015, the global prevalence of HIV infection was \_\_\_\_\_.

- e. 0.2%
- f. 0.4%
- g. 0.6%
- h. 0.8%

**Answer: D**

21. In \_\_\_\_\_, blood glucose homeostasis ceases to function because the beta cells of the pancreatic islets are destroyed.

- e. type 1 diabetes mellitus
- f. type 2 diabetes mellitus
- g. gestational diabetes
- h. both type 2 diabetes mellitus and gestational diabetes

**Answer: A**

22. Which year did the World Health Organization first express the right to health as a fundamental human right?

- e. 1946
- f. 1952
- g. 1987
- h. 2000

**Answer: A**

23. The influence of families, schools and neighbourhoods in explaining social inequalities in health can be categorised in which of the following systems?

- e. microsystem
- f. mesosystem
- g. exosystem
- h. macrosystem

**Answer: A**



24. Which philosopher was central to the conceptualization of human beings as composed of mind and body?

- e. John Locke
- f. Plato
- g. Rene Descartes
- h. Confucius

**Answer: C**

25. The WHO report in 2013 estimated that tobacco will kill as many as \_\_\_\_\_ people this century if the WHO Framework Convention on Tobacco Control is not implemented rapidly.

- e. 2 billion
- f. 1 billion
- g. half a billion
- h. quarter of a billion

**Answer: B**

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## Assessment Test Questions for Practice

### Section : II

Q.11) Environmental wellness includes

- a) Good self-esteem b) Eating balanced diet
- c) Can handle stressful situation d) None of the above

Q.12) Social Wellness includes

- a) Problem solving b) Improving natural environment
- c) Maintaining relationship with family and friends d) None of the above

Q.13) Spiritual wellness includes

- a) Developing compassion, caring, forgiving b) Developing compassion, problem solving
- c) Developing creativity d) None of the above

Q.14) Types of health are

- a) Physical health, social health b) Physical health, Mental health

c) Physical health, environment health d) None of the above

Q.15) Physical health includes

a) Adequate rest b) Balanced diet

c) Both a and b d) None of the above

Q.16) Physical health enhances

a) Heart function b) Breathing

c) both a and b d) None of the above

Q.17) Mental health includes

a) Emotional, social, Psychological wellbeing b) Social wellbeing

c) Emotional wellbeing d) None of the above

Q.18) Health is

a) Opposite of disease b) It improves efficiency

c) Both a and b d) None of the above

Q.19) Psychological health means

a) Feeling comfortable b) Enjoying life

c) both a & b d) None of the above

Q.20) What are the ways which can help you to achieve good health and wellbeing?

a) Eating healthy meals, regular exercising, b) Drinking lot of water only

c) Regular exercising only d) None of the above

Q.21) Which are the ways can help oneself to achieve good health and wellbeing?

a) Eat healthy meals b) Drink lot of water

c) Protecting skin from sunlight d) All of the above

Q.22) Influencing factors of health are

a) Social, Economic, Political factors b) Social factor only

c) Economical factor only d) Political factor only

Q.23) Factors which influence health are

- a) Individual behavior
- b) Individual factors
- c) Public service and infrastructure
- d) All of the above

Q.24) Other factors which affect health

- a) Social exclusion, Housing, Education,
- b) Social exclusion only
- c) Housing only
- d) Education only

Q.25) Health behavior refers to

- a) Hand washing
- b) It is dynamic in nature
- c) Both a and b
- d) None of the above

Q.26) Factors which influence wellbeing are

- a) Enough sleep, A sense of belongingness
- b) Regular exercise only
- c) A sense of belongingness only
- d) None of the above

Q.27) Disease means

- a) Discomfort
- b) Comfort
- c) Disability
- d) Both a and c

Q.28) Psychological disorders are

- a) Anxiety, depression, stress
- b) Stress, Anxiety
- c) Depression, anxiety
- d) None of the above

Q.29) Wellness refers to

- a) Individuals
- b) Group
- c) Individuals or Group
- d) None of the above

Q.30) Physical health refers to

- a) Drinking sufficient water
- b) Getting adequate sleep
- c) Getting sleep
- d) Both a and b

Q.31) Intellectual health refers to

- a) People who learn new things
- b) Good self esteem

c) Free of hazards d) None of the above

Q.32) Intellectual health refers to

- a) learning new challenges b) Good self esteem
- c) Maintaining good interpersonal relations d) Developing compassion

Q.33) Emotional health refers to

- a) Good self esteem b) Exercise
- c) Caring d) Forgiving

Q.34) Emotional health refers to

- a) Empathy towards others feeling b) Problem solving
- c) Having good nutrition d) Drinking lot of water

Q.35) Importance of health is helps a person to

- a) perform his life tasks in a correct way b) Higher medical costs
- c) Decreasing self esteem d) Life insurance is higher

Q.36) Influencing factors of health are at

- a) Individual level b) Community level
- c) Both a and b d) None of the above

Q.37) Factors influencing health are

- a) Social inclusion b) Social exclusion
- c) Both a and b d) None of the above

Q.38) Education helps in

- a) Achieving their potential b) Poor quality of housing
- c) Social exclusion d) None of the above

Q.39) What is HIA

- a) Health impact assessment b) Health impact assignment
- c) Health index assessment d) Health index assignment

Q.40) Advantages of being healthy

- a) Fighting diseases b) Decreases brain health
- c) Decreases performance d) None of the above

Q.41) Advantages of being healthy

- a) Building confidence b) Reduces stress
- c) Optimizes performance d) All of the above

Q.42) Psychological disorders refers to

- a) Mental illness b) Physical illness
- c) Both a and b d) None of the above

Q.43) Social exclusion refers to

- a) Poverty b) Old age
- c) Mental ill health d) all of the above

Q.44) Planning refers to

- a) Communities in which they live in b) Health services
- c) Financial stability d) None of the above

Q.45) WHO principles includes

- a) Development of child b) Health is one of the fundamental right
- c) Promotion and protection of health d) All of the above

Q.46) Types of health

- a) Mental health only b) Physical health only
- c) Mental and physical health d) None of the above

47). Financial health refers to

- a) Physical activity b) Mental illness
- c) Good income d) None of the above

Q.48) Spiritual health refers

- a) Meditation b) Exercising

c) Body composition d) All of the above

Q.49) What influence your health

a)Heredity b)Environment

c)Physical environment d)All of the above

Q.50)Cultural environment refers to

a)Collection of beliefs, behavior of group

b)Health care facility

c)Both a and b

d)None of the above



VTU - SFH Notes

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Visvesvaraya Technological University



University Module wise Notes, Material & Model Question Papers and Activities sheets for Students & Faculties of VTU

**Scientific Foundations of Health (SFH)**  
**(Health & Wellness) - 21SFH19/29**

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