

# Scientific Foundations of Health

| <b>Scientific Foundations of Health</b>   |                   |             |                      |
|---|-------------------|-------------|----------------------|
| Course Code   | <b>21SFH19/29</b> | CIE Marks   | 50                   |
| Teaching Hours/Week (L:T:P: S)  | 1:0:0             | SEE Marks   | 50                   |
| Total Hours of Pedagogy   | 02 Hours/Week     | Total Marks | 100                  |
| Credits   | 01                | Exam Hours  | 60 Minutes / 01 Hour |
| <b>Course objectives:</b><br>The course 21SFH29 will enable the students: <ul style="list-style-type: none"><li>① To know about Health and wellness (and its Beliefs)</li><li>② To acquire Good Health &amp; It's balance for positive mind-set</li><li>③ To Build the healthy lifestyles for good health for their better future</li><li>④ To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world</li><li>⑤ To learn about Avoiding risks and harmful habits in their campus and outside the campus for their brightfuture</li><li>⑥ To Prevent and fight against harmful diseases for good health through positive mindset</li></ul> |                   |             |                      |

## **Module-1**

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

What is Health, Why Health is 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,

## **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 the 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 the 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 positive mindset.



# **MODULE 1**

## **Good Health and It's Balance for Positive Mindset**

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# What is 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.
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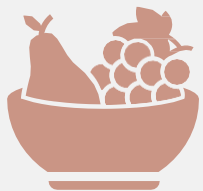


Health has an important role in feeling happy, as there are many people who suffer from diseases, but the health enables them to fight diseases, as a result, they achieve physical fitness and feel comfortable or enjoy life like any normal person.





The World Health Organization (WHO) defines health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (illness).”



WHO defines wellness as “the optimal state of health of individuals and groups,” and wellness is expressed as “a positive approach to living.”



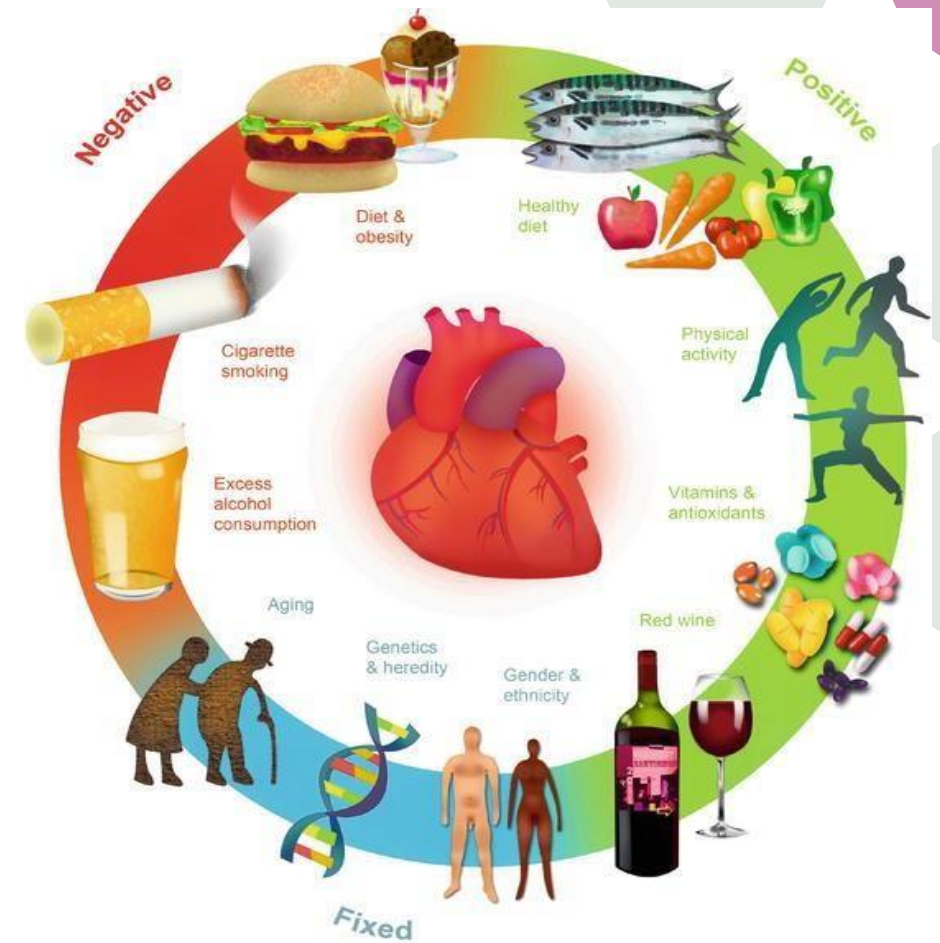
# Health versus wellness

- 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.
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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.



# Health Dimensions

**1. Physical**

**2. Mental**

**3. Emotional**

**4. Spiritual**

**5. Social**



## A. Physical

Physical health is the state of being free from illness and injury.

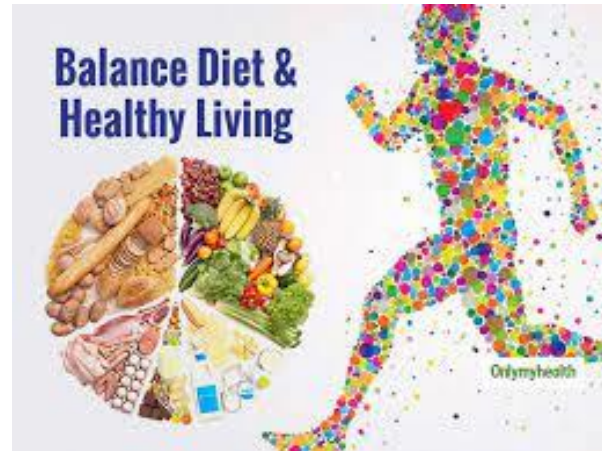
### 1. Fitness:

- Exercise regularly
- Maintain weight
- Stay active
- Rest



2. **Nutrition:** The process of providing or obtaining the food necessary for health and growth.

- Balanced diet:
- ✓ Carbohydrates
- ✓ Proteins
- ✓ Fats
- ✓ Vitamins
- ✓ Minerals
- ✓ Water



3. **Medical self care:** WHO defines self care as “the ability of individuals, families and communities to promote health, prevent diseases, maintain health and to cope with illness and disability with or without the support of health care provider.

- Routine health check ups
- Proper vaccination



4. **Control of substance abuse:**

- Avoid smoking, alcohol, drugs
- Avoid addiction.



## B. Mental:

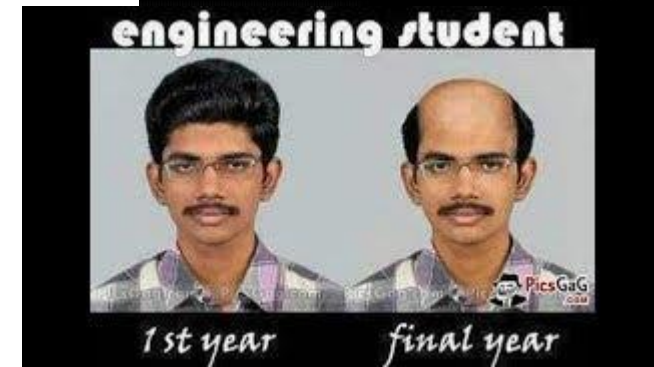
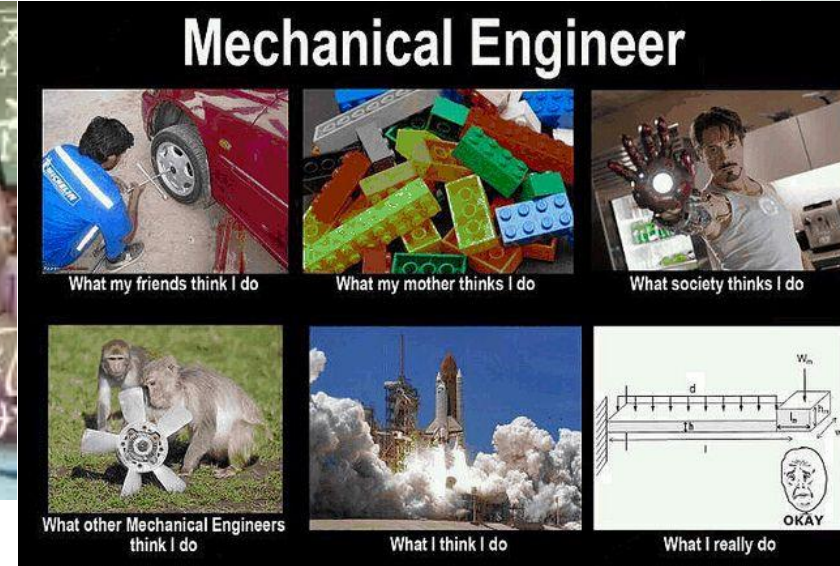
Mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.

### 1. Emotional:

- Identifying and nurturing feelings and conscious inner state
- Journaling
- Practice gratitude & positive mindset
- Meditation

### 2. Psychological:

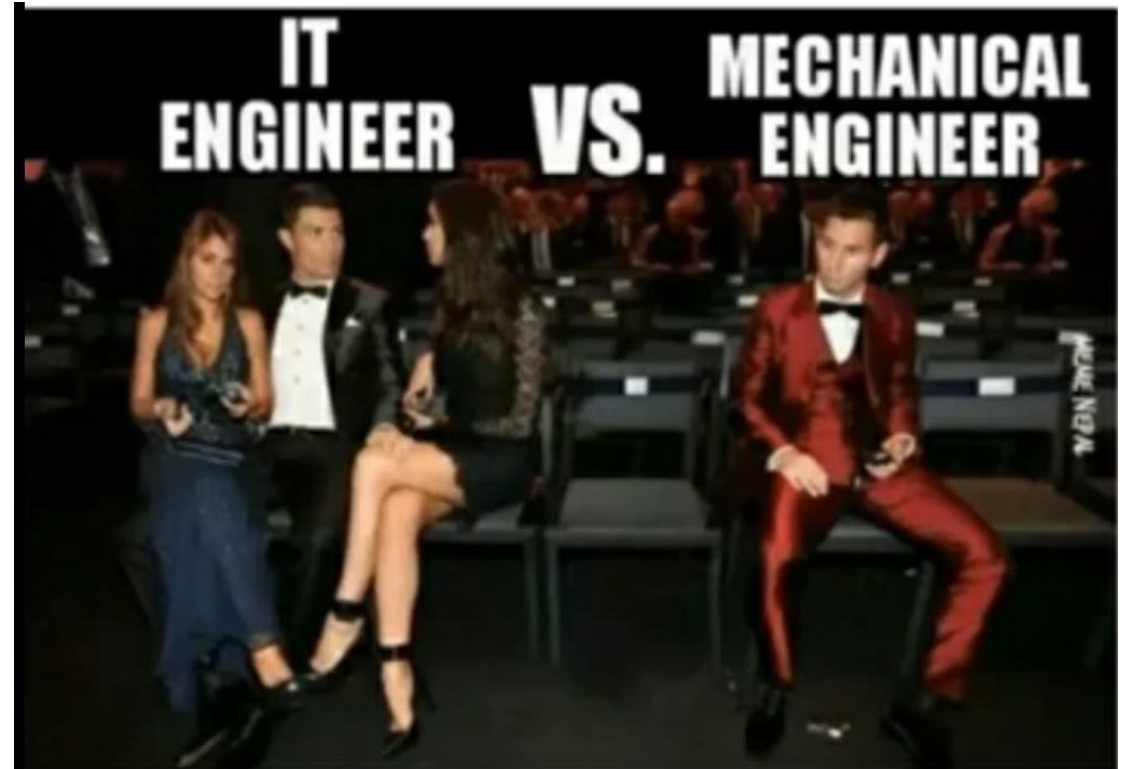
- Guided meditation
- Deep breathing
- Manage social media time
- Connect with others
- Stress management



## C. Social:

Social well being is sense of belonging to community and making contribution to society

- Being connected with friends, family and community
- Giving and receiving support
- Having meaningful relationships
- Being active member of society
- Caring for and about others



# Why is health 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.
- A healthy person is a person who is able to serve himself, his nation and his community.
- Presence of healthy individuals in society, means the presence of productive individuals who possess the power and the ability to give and serve.
- Psychologically healthy people feel comfortable and happy in their lives. They enjoy life well, establishing his relationships with people and showing love and kindness.
- 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

# Why is health important now?

- Social distancing and the loss of routine can create pressure both physically and psychologically. Parallely, all are enforced to perform at the same level.
- Many people are struggling to work full-time remotely while simultaneously caring for their family at home.
- Health workers are overloaded.
- Take time to listen to body and mind (physically, mentally, emotionally).  
Positive self talk, meditation, Yoga.
- **Nutrition : Healthy food**
- **Physically active: Move your body**
- **Rest: Prioritize sleep**
- **Socialize virtually: Find ways to connect socially**
- **Find ways to ease stress**



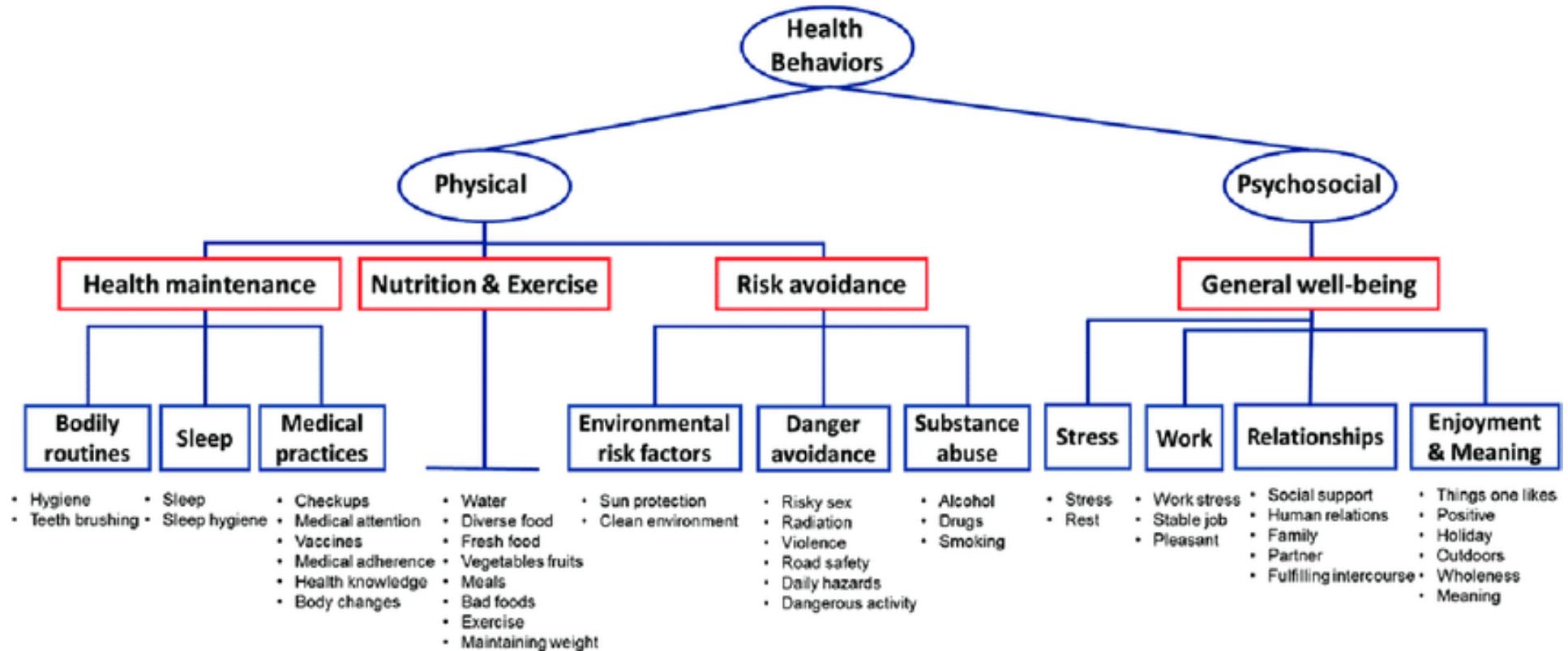
# What influences Health?

- Social and economic environment
- Physical environment
- Person's individual characteristics and behaviors.
- Income and social status
- Education
- Employment and working conditions
- Social support networks
- Culture.
- Genetics
- Personal behavior and coping skills
- Health services - access
- Gender

<https://www.who.int/news-room/questions-and-answers/item/determinants-of-health>

# Health and Behavior

- Health behaviors are actions individuals take that affect their health.
- Behavioral factors such as physical activity and diet, tobacco use, alcohol abuse, disease screening etc. exert strong influence on health



# Health beliefs:

- Health beliefs are what people believe about their health, what they think constitutes their health, what they consider the cause of their illness, and ways to overcome an illness it.
- Health beliefs are culturally determined, and all come together to form larger health belief systems.

## Health Belief Model

### Modifying Factors

Age  
Gender  
Geographic Location  
Education  
Ethnicity  
Health Knowledge  
Immigration Status  
Income  
Race  
Wealth

### Individual Beliefs

Perceived Susceptibility to Disease  
Perceived Severity of Disease  
Perceived Benefits of Preventative Action  
**Perceived Barriers to Preventative Action**  
Perceived Self-efficacy

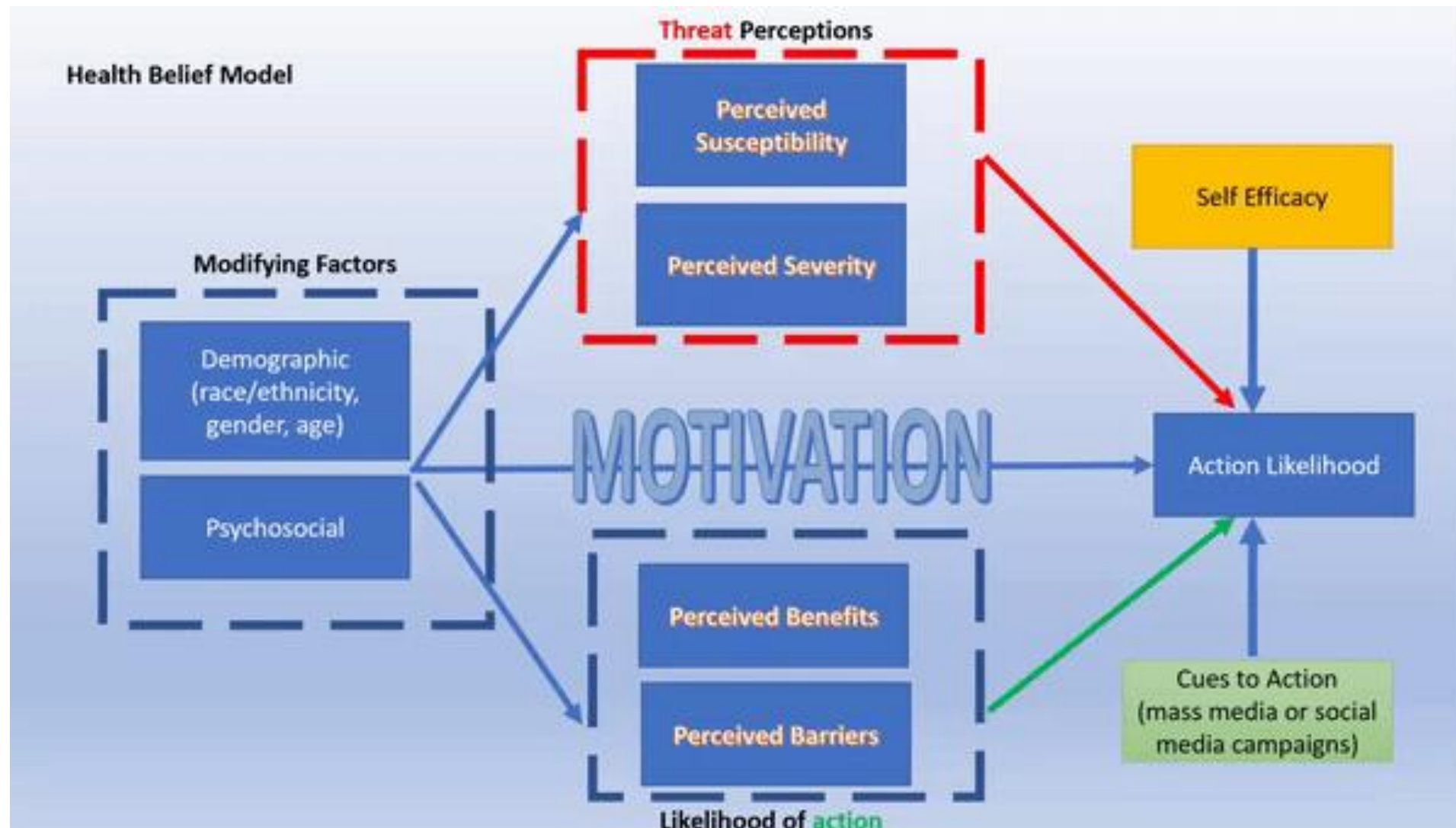
### Actions

Individual behaviors

Cues to action  
Media campaigns  
Physician reminders  
Friend/family member's illness

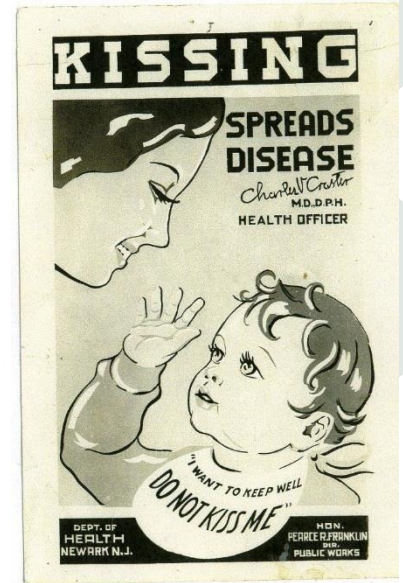


# HEALTH BELIEFS MODEL



# Health and Advertisements

- A notice or announcement in a public medium promoting a product, service, or event or publicizing a job vacancy is called Advertisement.
- Advertising means: newspaper, TV, radio, magazine, internet, etc.
- Health related advertisement are for Fitness, Medical, Wellness, Pharmaceutical & Health brands. Advertisements extensively discuss food and nutrition, tobacco, alcohol, and prescription drugs.
- Research indicates that these health-related communications can have significant and measurable effects on consumer cognitions, emotions, and behaviors. 48% of people exposed to the health-promoting advertisements made searches within the next month for weight loss information.
- Food products, Health supplements, Gyms, group workouts, anti-aging products, Health instruments, Health insurance, beauty products
- Advertisement has both positive and negative influence on health



Green Tea



# Advantages of good health:

## Short term benefits:

- Maintain weight
- Feel better: Good energy and mood
- Improved mental clarity
- Supports daily activities and help recovery
- More resilient to pressure and stress
- Better Stress Management
- Avoid Addictions
- Protect Eyesight
- Lower Medical Costs
- High Self-Esteem

## **Long term good health benefits:**

- Live happy life
- Longer life span.
- More energy to pursue dreams.
- Maintains weight and physical appearance
- Increased Immunity
- Great sense of well being: Enhanced self- esteem
- Improves overall quality of life.
- Role model to others
- Good health has positive influence.

# Health and Society

- Society is an organization or club formed for a particular purpose or activity
- An individual's social environment can positively or negatively affect a person's health
- **Social environment factors:** A social environment has to do with the culture and relationships that surround an individual.
  - Occupation and income status
  - Education
  - Family and friends
  - Access to health care
  - Social Environment and Weight Gain
  - Social Environment and mental health
  - Social Environment and Disease Onset



# Health and Personality

- Personality traits are generally defined as a person's characteristic thoughts, feelings, and behaviors.
- Introverts (people who are typically quiet, reserved, and introspective) and extroverts (people who are social and outgoing)
- Optimistic (People who are positive and assume good things last) and pessimistic (people who have negative feelings).
- Neurotic (people who experience anxiety, depression, shy, self-doubt)
- Conscientious (people who are high-achieving, dependable, careful)
- Resilient (people adapting well to adversity, trauma, tragedy or stress)
- Narcissistic (self-centered people)
- Personality traits may influence whether a person engages in health-enhancing or health-damaging behaviors.

## **Health and family**

- “Family is a group of biologically- related persons living together and sharing the common kitchen and purse”.
- The health of one member affects the welfare of other members in the family.
- Every family is unique and it is affected by ever aspect of community life.
- Family health is “a state of positive interaction between family members which enables each members of the family to enjoy optimum physical, mental, social and spiritual well-being”.
- **Functions of family:**
  - Socialization of family members.
  - Economic stability.
  - Care of dependent members.
  - Emotional support for members.
  - Satisfy social, intellectual, emotional and psychological needs of family.

- Upbringing children for behavior and social approved conduct.
- Sense of family identification
- Interaction among family members in health, disease, counselling and rehabilitation

➤ **Determinants of family health**

- Living and working conditions
- Physical environment
- Psycho-social environment
- Education and economic factors
- Health practices
- Cultural factors
- Gender
- Genes

## Health and Profession

- Work-related problems can affect our physical, emotional and mental health.

### Common causes of work-related stress

- Job dissatisfaction
  - Workplace injury
  - Stress
  - Discrimination, bullying, violence
  - Retirement
  - Long hours
  - Heavy workload
  - Poor pay
  - Boredom
  - Safety issues
  - No promotions
  - Job insecurity
  - Conflicts with co-workers or bosses.
  - Unemployment
- 
- The stress of dealing with changing work circumstances that are out of your control can increase the risk of health problems such as anxiety and depression

## **Disparities of health in different vulnerable groups**

Health disparity is “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage”

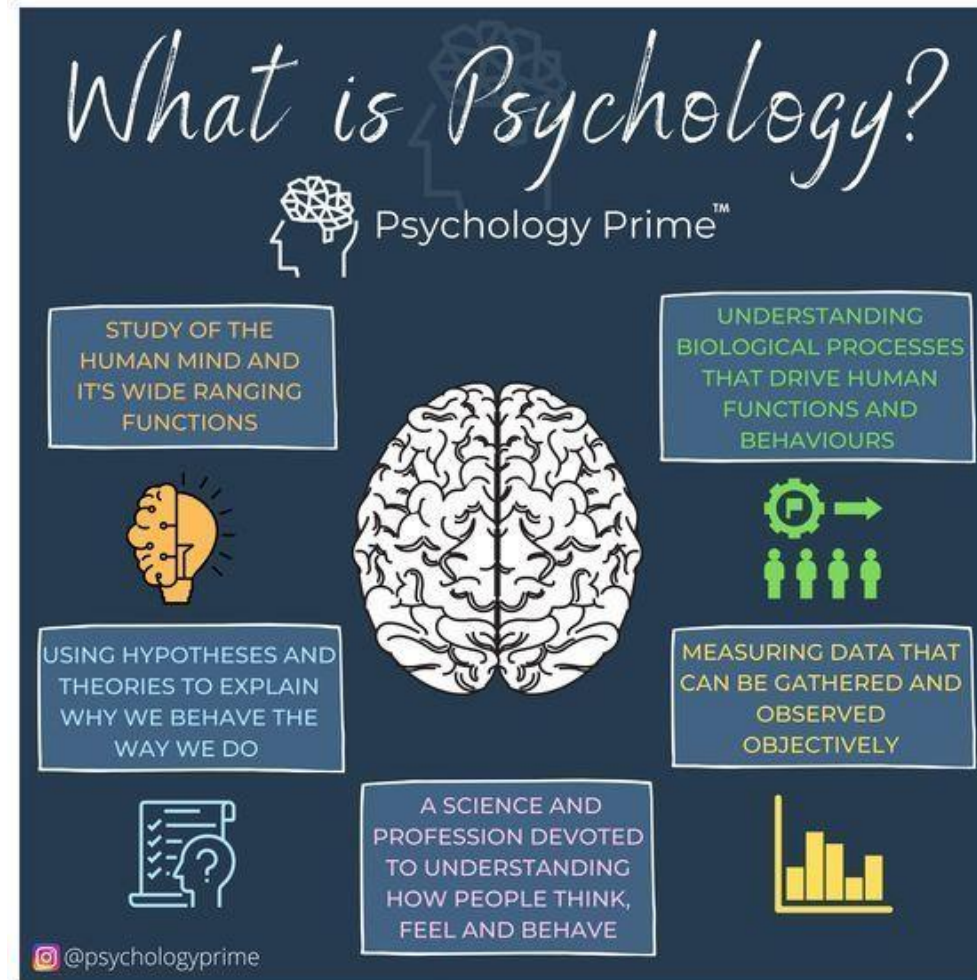
Certain groups in the society often encounter discriminatory treatment and need special attention to avoid potential exploitation are called vulnerable Groups

- Race and ethnicity: SC, ST & Dalits
- Gender.
- Sexual identity and orientation.
- Disability status or special health care needs.
- Geographic location (rural, urban and migrants)

## Health and psychology

Psychology is the scientific study of the mind and behavior

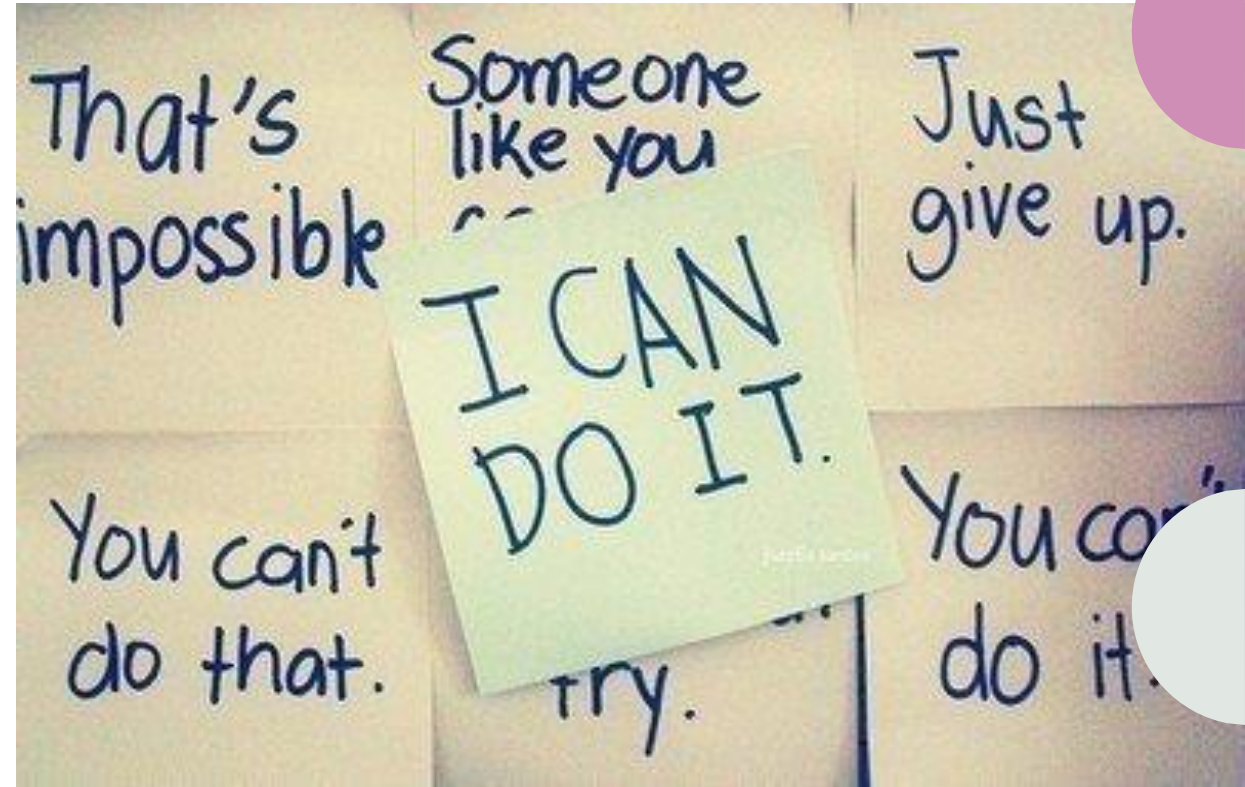
Health and Well-Being describes psychological well-being as “the combination of feeling good and functioning effectively.”



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 & intimacy.



## **Methods to improve good psychological health**

1. Self acceptance
2. Talk about your feelings
3. Physically active : Move your body
4. Nutrition : Healthy food
5. Rest: Prioritize sleep
6. Stress Management
7. Care about others



# Psychological disorders

- **Neurodevelopmental Disorders**
  - Intellectual Disability
  - Global Developmental Delay
  - Communication Disorders
  - Autism Spectrum Disorder
  - Attention-Deficit Hyperactivity Disorder (ADHD)
- **Bipolar and Related Disorders**
  - Mania
  - Depressive Episode
- **Anxiety Disorders**
  - Generalized Anxiety Disorder (GAD)
  - Agoraphobia
  - Social Anxiety Disorder
  - Specific Phobias
  - Panic Disorder
  - Separation Anxiety Disorder
- **Stress-Related Disorders**
  - Acute Stress Disorder
  - Adjustment Disorders
- **Dissociative Disorder**
  - Dissociative Amnesia
  - Dissociative Identity Disorder

- **Somatic Symptom Disorders**
  - Illness Anxiety Disorder
  - Conversion Disorder
- **Eating Disorders**
  - Anorexia Nervosa
  - Bulimia Nervosa
  - Rumination Disorder
  - Pica
- **Sleep Disorders**
  - Narcolepsy
  - Insomnia Disorder
  - Hypersomnolence
  - Breathing-Related Sleep Disorders
  - Parasomnias
  - Restless Legs Syndrome
- **Disruptive Disorders**
  - Intermittent Explosive Disorder
  - Oppositional Defiant Disorder
  - Depressive Disorders
- **Depressive Disorders**
  - Major depressive disorder:
  - Dysthymia
  - Substance/medication-induced depressive disorder

# How to maintain good health

- Nutrition: Eat right
- Rest : Get optimum sleep
- Fitness: exercise regularly
- Manage social media time
- Medical check-ups
- Timely vaccination
- Control of substance abuse
- Stress Management
- Positive self talk
- Practicing gratitude
- Journaling
- Meaningful relationship with family and friends



# How can 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 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.

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Be Well,  
Do Well.

