

LAINAB TARIQ

BATCH 392

National Officers Academy

Every Day Science

What is the relationship b/w human physiology and human behaviour?

The **human body** is highly complex system made of organ, tissue and cells. All these parts work together to allow us to think, feel, move and respond us to the world.

Human physiology explain how body work.

while human behaviour explain how people act.

Both are closely linked b/c the body shapes behaviour and behaviour affect the body.

"The brain and body work together to create decision-making."

## 1: Human Physiology:- (How the body work)

### 1.1 Nervous system:-

The brain, spinal cord and nerves control all actions.

The brain sends messages through nerves to help

us move, speak, learn and sense the environment.

## 1.2: Endocrine System:-

This system uses hormones to control growth, energy and emotions.  
Hormones like adrenaline help in emergencies

## 1.3: Respiratory System

The lungs help us breathe  
Oxygen is necessary for brain function,

## 1.4: Digestive System:

Break down food to supply energy  
Lack of proper nutrients can affect mood, focus and behavior

## 1.5 Circulatory System:-

The heart pumps blood carrying oxygen and nutrients to every cell.

Good circulation keeps the brain active

## 1.6 Immune System:-

Protects the body from diseases  
When the immune system is weak or fighting infections  
behavior changes like tiredness.

## 1.7: Reproductive System:-

Controls physical development during puberty through hormones

These changes influence social behavior and emotional responses.

## 2: Human Behavior:- (how human act)

### 2.1: Emotional Behavior:-

Emotions like happiness, anger, fear and sadness arise from brain activity and hormonal changes.

### 2.2 Social Behavior:-

- How we interact with others
- The brain's social regions help us understand other people's feelings and intentions

### 2.3 Cognitive Behavior:-

- Thinking, planning, problem-solving and decision making.
- Controlled by the front part of the brain

### 2.4 Learned Behavior:-

- Shaped by experiences, environment, culture and family.

### 2.5 Habitual Behavior:-

- Actions repeated regularly (like routines)
- Habits are stored in special brain circuits.

### 2.6:- Developmental Behavior:-

- changes in behavior due to physical growth especially during childhood and adolescence

## 3:- Relationship Between human physiology and human behavior:-

Human physiology and human behavior are deeply connected.

### 3.1:- Brain Control Behavior:-

thinking start in the brain

### Hormones Affect Emotions:

high cortisol more stress

Balanced Serotonin calm behavior

### 3-3 Body state Affects Behavior:

hunger makes someone irritable

Tiredness reduces focus

Good health improves mood

### 3-4: Behavior changes the body:-

Exercise increases happy hormones

Stress can weaken the immune system

Learning changes the structure of the brain  
(neuroplasticity)

### 3-5 Sensory Inputs shape Behavior:-

what we see, hear, smell or feel influences our  
reaction and decisions.

### 3-6: Genetic and Biological influences:-

Some behavior tendencies (like temperament) are  
partly influenced by genes

William James: Emotions arise from the bodily  
responses we feel

Antonio Damasio: The body and brain work  
together to guide decision-  
making and behavior.