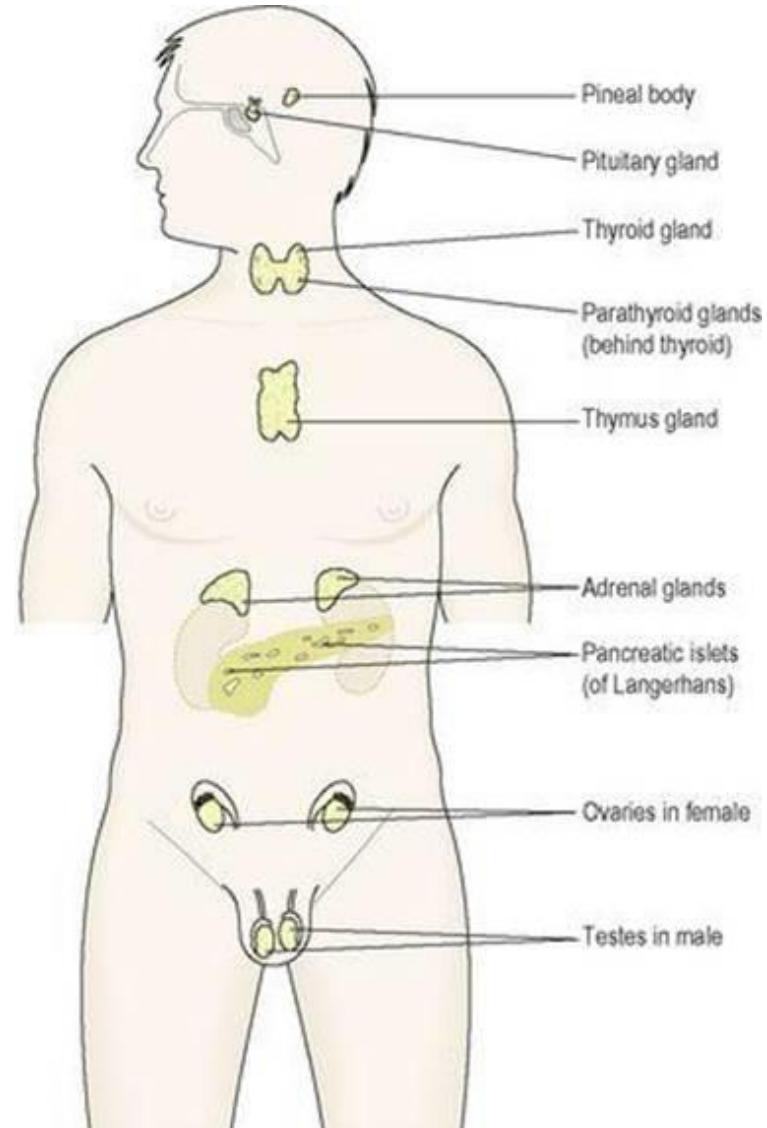


# GLANDS गुण्डि - M-Imp



# GLANDS:

A gland is an organ which produces and releases substances that perform a specific function in the body.

## TYPES OF GLANDS:

**1. EXOCRINE GLANDS (DUCT GLANDS):** Exocrine glands are glands that secrete substances onto a surface by a duct. It mainly releases Juices and Enzymes.

**Eg:** Sweat glands, lacrimal (tear) gland, Mammary glands, Salivary gland, liver, Sebaceous (oil) gland, stomach, Small Intestine

**2. ENDOCRINE GLANDS (DUCTLESS GLANDS):** Endocrine glands are ductless glands of the endocrine system that secrete their products, hormones, directly into the blood.

बहिःस्रावी

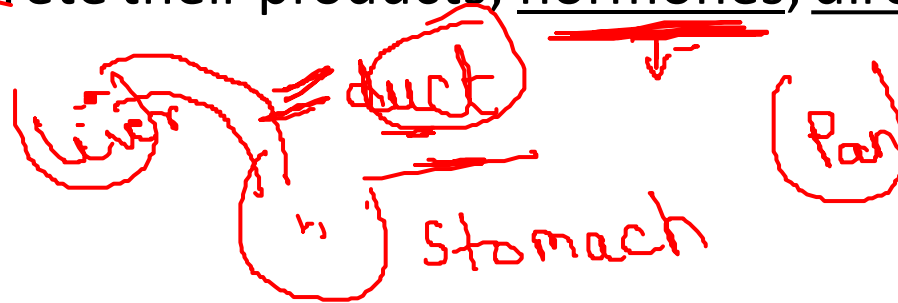
Lacrimal (Eye)

Largest gland - Liver

Largest organ - Skin

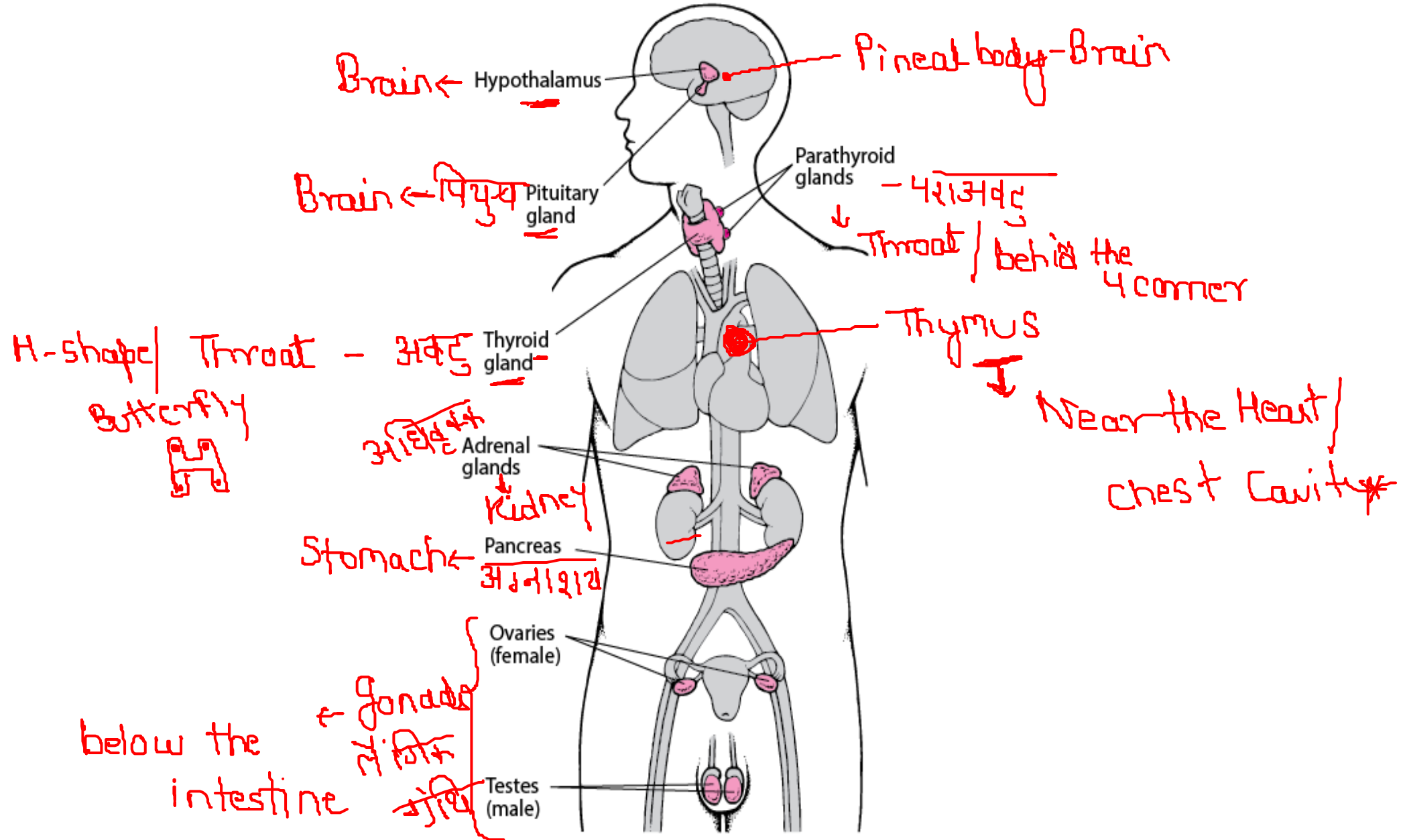
Longest organ - Small intes.

Blood रक्त



# NAME AND LOCATION OF ENDOCRINE GLANDS:

9



# PINEAL BODY: ~~पिनॉयल बॉडी~~

- Smallest Endocrine gland / Smallest gland.
- Also known as "3<sup>rd</sup> Eye of our body" / "Biological Clock".

## Hormones:

1. Melatonin: It controls our body clock (time table).

It controls our sleep.

Also known as "Hormones of Darkness"

2. Serotonin: Also known as "Feel Good Hormone".

## Disease:

Deficiency: Insomnia

Excess: Irritation, Abnormal Body Clock



जैविक घड़ी

21 days

Melatonin

जैविक घुन

## Thyroid:

- Largest Endocrine Gland.
- Also known as “Butterfly Gland”.

### • Hormone:

1. Thyroxin: It controls our Metabolism (all the process needed for our life).

Eg: Heartbeat, digestion, Respiration

\*\*\*“Iodine is important for the formation of Thyroxin”

2. Calcitonin: Provides rigidity to bones.

### Disease:

Deficiency: Myxedema (swelling in body, sudden weight gain)----- in adult

Cretinism (in child)

Excess: Grave’s Disease (sudden weight loss, bulging of eyes like frog)

## **PARATHYROID GLANDS:**

- There are 4 lobes (parts)

### **Hormone:**

Parathormone (PTH):

- It is also known as "Collip's Hormone".
- It counteract "Calcitonin"
- It helps in the formation of bones.

### **Disease:**

Deficiency: Tetany (problem in muscle motion).

Excess: Osteoporosis, Stones (Calcium oxalate,  $\text{CaC}_2\text{O}_4$ )

## **THYMUS:**

- Also known as Juvenile Gland.
- It provides immunity.
- The size of Thymus decreases as the age pass.
- Thymus is most active during the age of 10-15 years (pubic age)

## **Hormone:**

### **Thymosin:**

Also known as Juvenile Hormone

It helps in the activation of WBC thus it provides immunity

## **Disease:**

Deficiency: Low immunity (many disease).

Excess: High immunity (Autoimmunity).