# **Major Endocrine Glands and Hormones**

### Pituitary gland

Posterior lobe (stores and releases hormones made in the hypothalamus)

- Antidiuretic hormone (ADH)
   Stimulates kidneys to reabsorb water
- Oxytocin
   Stimulates uterine contractions and mammary gland cells

#### **Anterior lobe**

- Growth hormone (GH)
   Stimulates growth and metabolism
- Prolactin (PRL)
   Stimulates milk production
- Follicle-stimulating hormone (FSH)
   Stimulates egg and sperm production
- Luteinizing hormone (LH)
   Stimulates ovaries and testes
- Thyroid-stimulating hormone Stimulates thyroid gland
- Adenocorticotropic hormone (ACTH)
   Stimulates adrenal cortex

#### **Thymus**

Thymosin
 Stimulates T cell development (immune system)

#### **Pancreas**

- Insulin
   Decreases blood glucose level
- Glucagon Increases blood glucose level

#### Testes

Testosterone
 Supports sperm formation and male secondary sex characteristics

### **Pineal gland**

Melatonin
 Involved in day/night cycles

### **Hypothalamus**

• Releasing hormones
Trigger the anterior pituitary to
secrete hormones

## Thyroid gland

- Thyroxine
   Stimulates and maintains metabolic processes
- Calcitonin
   Lowers blood calcium level

## Parathyroid glands (4)

Parathyroid hormone (PTH)
 Raises blood calcium level

### **Adrenal glands**

#### Adrenal medulla

 Epinephrine and norepinephrine Increase blood glucose; increase metabolic activities; constrict certain blood vessels

#### Adrenal cortex

Corticosteroids

Promote glucose synthesis, reduce inflammation, increase blood glucose

#### **Ovaries**

Estrogen

Stimulates uterine lining growth and development of female secondary sex characteristics

Progesterone
 Promotes uterine lining growth

