Endocrine system

Ch 45

**Fig 45.6**

Hormone:

Endocrine gland

Exocrine gland:

Neurosecretory cells:

oxytocin:

antidiuretic hormone:

Feedback loops:

Hormonal control pathways

**Fig 45.2**

Water soluble hormones

**Fig 45.3a**

Fat soluble hormones

**Fig 45.3b**

Diverse response

**Fig 45.4**

 receptor

 receptor

Paracrine signaling

Cytokine:

Nitric oxide:

Prostaglandins:

(**Fig 45.5**)

Pituitary & Hypothalamus

Fig 45.6 & 7 & 8

Hypothalamus:

Pituitary gland:

Posterior pituitary: (Fig 45.7)

ADH:

Oxytocin:

Anterior pituitary: (Fig 45.8)

Tropic hormones:

FSH:

LH:

TSH:

ACTH:

Nontropic hormones:

MSH:

Malignant melanoma:

Endorphin:

Prolactin:

Growth hormone:

Hypersecretion:

Hyposecretion:

Thyroid: (**Fig 45.6**)

T3:

T4:

Hyperthyroidism:

(**Fig 45.10**)

Hypothyroidism:

Iodine deficiency:

Feedback regulation (**Fig 45.9**)

Parathyroid (**fig 45.11**)

Ca+ balance

Parathyroid hormone:

Calcitonin:

Pancreas: (**fig 45.12**)

98% by weight produce digestive enzymes – exocrine

2% by weight is Islet of Langerhans

-cells

-cells

Adrenal glands: (fig 45.13)

Adrenal medulla:

Catecholamine

Adrenal cortex:

Adrenalcorticoid

Mineralcorticoid:

Aldosterone

Glucocorticoid:

Cortosol

Testes and ovaries

Testes:

Testosterone:

Inhibin:

Ovary:

Estrogen:

Estradiol:

Progesterone: pro-

Inhibin:

Relaxin:

Pineal gland

Melatonin: