

Endocrine system

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Physiology

- *The secretion and release of growth hormone: Choose the incorrect answer:*
- *A. Is promoted by hypothalamic GH releasing hormone and is pulsatile in nature*
- *B. Is prompted by IGFS*
- *C. Is increased by exercise and stress*
- *D. Is promoted by acetylcholine indirectly*
- *E. Is strongly inhibited by hypothalamic somatostatin*

- *Answer: B*

- *The increased levels of one choice of the following hormones accompany the maternal morning sickness:*
- *A. Progesterone and estrogen*
- *B. Human placental lactogens (HPLS) and prolactin*
- *C. TRH and TSH*
- *D. GnRh and LH*
- *E. hCG and Thyroxine*

- *Answer: E*

- *Antidiuretic hormone: Choose the correct answer:*
- *A. Is produced by posterior pituitary gland cells*
- *B. Increases the permeability of the cells in the 100p of Henle to water*
- *C. Secretion is little affected by changes in plasma osmolality of less than 10%*
- *D. Secretion increases when plasma volume falls but osmolality is unchanged*
- *E. Causes the osmolality of the plasma to rise*
- *Answer: D*

- *If an adult non-pregnant woman injected with estrogen 48 hrs before the time of ovulation one of the followings choices is not true:*
- *A. LH secretion drastically increases. (surge)*
- *B. GnRh secretion increases.*
- *C. FSH increases.*
- *D. Ovulation occurs.*
- *E. Ovulation does not occur*

- *Answer: E*

- *One of the followings about testosterone and related hormones is not true:*
- *A. testosterones produce DHT which functions almost in all stages of life*
- *B. several tissues besides the testes produce the testosterone hormone*
- *C. DHT can be converted to steroidal.*
- *D. testosterone functions as a prohormone*
- *E. the biological activity of DHT is too much higher than that of testosterone*
- *Answer: D*

- *During sleep there is a fall in the circulating level of: Choose the incorrect answer:*
- *A. cortisol*
- *B. T4*
- *C. Growth hormone*
- *D. Adrenaline*
- *E. insulin*

- *Answer: A*

- *1,25-(OH)₂ - Vitamin D synthesis is increased by each of the following EXCEPT:*
- *A. Vitamin D deficiency*
- *B. Calcitonin*
- *C. Parathyroid hormone (PTH)*
- *D. Phosphate deficiency*
- *E. Calcium deficiency*

- *Answer: B*

- *The free functional percentage of Aldosterone is:*
 - *A. relatively high*
 - *B. very low*
 - *C. very high*
 - *D. high*
 - *E. low*
-
- *Answer: A*

- *Aldosterone secretion is stimulated by increases in each of the following EXCEPT:*
- *A. Renin*
- *B. Sodium*
- *C. ACTH*
- *D. Potassium*
- *E. Angiotensin-converting enzyme*

- *Answer: B*

- *Which hormone initiates uterine contraction:*
- *Answer: Fetal ACTH*

- *Hormones that play an important role in maintaining plasma concentration from K^+ within normal limits:*
- *Answer: insulin*

- *Which hormone needs calcium to be released:*
- *Answer: insulin*

- *Not true about hormone:*
- *Answer: hormones have same function on different target tissue*

- *What is the hormone that decreases insulin secretion:*
- *Answer: leptin*

- *Which of the following hormones is very important during early development of the nervous system:*
- *Answer: T4*

- *What is the chemical nature of vitamins:*
- *Answer: steroids*

- *Which of the following is incorrect regarding Vitamin D:*
- *Answer: D2, D3 they have the same efficient*

- *Which of the following does not use cAMP as a second messenger:*
- *Answer: **insulin & oxytocin (both are correct)***

- *Which hormone doesn't contribute with the GH in protein synthesis:*
- *Answer: **Estrogens***

- *Which one of the following hormones has been implicated as one of the major determinants of growth in normal post-uterine life:*
- *A. Androgens*
- *B. IGF-1*
- *C. T3*
- *D. Cortisol*

- *Answer: B*

- *Which organ or tissue is primarily responsible for producing 25-(OH). D:*
- *A. skin*
- *B. bone*
- *C. kidney*
- *D. liver*
- *E. intestine*

- *Answer: D*

- *Which one of the following hormones gives an example for permissive hormonal interaction functioning with glucagon:*
- *A. Insulin*
- *B. Somatomadins*
- *C. T4*
- *D. GH*
- *E. cortisol*

- *Answer: E*

- *A decrease in extracellular fluid volume would be expected to cause increased secretion of all of the following EXCEPT:*
- *A. Estrogen*
- *B. Renin*
- *C. Vasopressin*
- *D. ADH*
- *E. Cortisol*

- *Answer: A*

- *Which of the following are incorrectly paired:*
- *A. Epinephrine: increased glycogenolysis in skeletal muscle*
- *B. Progesterone: increased plasma glucose level*
- *C. Glucagon: increased gluconeogenesis*
- *D. Growth hormone: increased plasma glucose level*
- *E. Insulin: increased protein synthesis*

- *Answer: B*

- *In which of the following thyroid abnormalities goitre DOES NOT occur:*
- *A. Hypothyroidism due to lack of iodine*
- *B. Hyperthyroidism due to TSH*
- *C. Hypothyroidism due to primary failure of thyroid gland*
- *D. Hyperthyroidism due to hypersecreting thyroid tumor*
- *E. Hyperthyroidism secondary to excess hypothalamic secretion*

- *Answer: D*

- *One of the following about the comparison of cortisol & aldosterone is NOT TRUE:*
- *A. The role of cortisol in mineralocorticoid contribution is about 50% compared to aldosterone*
- *B. Cortisol plays role in mineralocorticoid activity*
- *C. The role of aldosterone in glucocorticoid contribution is very low compared to cortisol*
- *D. Aldosterone plays role in glucocorticoids activity*
- *E. Secretion rate of aldosterone is much more than cortisol*

- *Answer: E*

- *About the pituitary gland, choose the correct statement:*
- *A. Somatotrops hyperplasia during pregnancy, vulnerable portal circulation and severe postpartum uterine hemorrhage may lead to Sheehan syndrome*
- *B. Trauma to the hypothalamohypophyseal tracts may cause central diabetes insipidus*
- *C. It's posterior part contains the cells of the paraventricular and supraoptic nuclei*
- *D. Pituitary apoplexy is chronic hemorrhage of the pituitary gland*
- *E. Its anterior part contains basophilic cells which may be somatotrops or lactotrophs*
- *Answer: B*

- *Which of the following hormones is very important during early development of the nervous system:*
- *A. Cortisol*
- *B. Insulin*
- *C. Parathyroid hormone*
- *D. Growth hormone*
- *E. Thyroid hormone*

- *Answer: E*

- *Trauma to the hypothalamohypophyseal tracts may cause:*
- *A. Pituitary apoplexy*
- *B. Sheehan syndrome*
- *C. Bitemporal hemianopsia*
- *D. Craniopharyngioma*
- *E. Central diabetes insipidus*

- *Answer: E*

- *Which of the following biochemical events is NOT true regarding the thyroid hormone synthesis:*
- *A. One monoiodotyrosine molecule combines with one diiodotyrosine molecule to form one triiodothyronine molecule*
- *B. Two diiodotyrosine molecules combine to form one molecule of thyroxine*
- *C. Two iodine molecule combine with one tyrosine molecule to form one diiodotyrosine molecule*
- *D. Iodine supply occurs within the thyroid follicular cell only*
- *E. Four iodine molecules combine with two tyrosine molecules to form one tetraiodothyronine molecule*
- *Answer: D*

- *ACTH secretion is inhibited by*
- *A. Cortisol*
- *B. Norepinephrine*
- *C. Androstenedione*
- *D. ADH*
- *E. Testosterone*

- *Answer: A*

- *Which of the following effects of insulin requires the least amount of the hormone:*
- *A. Inhibition of lipolysis*
- *B. Stimulation of muscle glucose transport*
- *C. Stimulation of muscle glucose uptake*
- *D. Inhibition of hepatic glucose production*
- *E. Stimulation of amino acid uptake*
- *Answer: E*

- *Which one of the followings about cortisol functions is not true*
- *A. Gluconeogenesis*
- *B. Glycogenolysis*
- *C. inhibition of glucose uptake*
- *D. ketogenesis*
- *E. lipolysis*

- *Answer: B*

- *One of the followings about the menstrual cycle is not true:*
- *A. The development of the primary follicles occurs only at puberty till menopause.*
- *B. Before the beginning of the ovarian cycle few follicles are activated.*
- *C. Sometimes ovulation fails to occur even if the ovarian cycle begins normally.*
- *D. almost all the non-growing follicles are primordial follicles*
- *E. This activation occurs genetically even if the gonadotropin hormones are very low or absent*

- *Answer: E*

- *Which one of the following about the function of the reproductive systems is NOT true:*
- *A. Hormones secreted by gonads cause the appearance of features typical of the adult male or female and the onset of the sexual cycle in the female*
- *B. In both sexes, gonadotropins secretion is cyclic.*
- *C. Evidence indicates that male sexual behaviour and the male pattern of gonadotropin secretion is due to the action of male hormones on the brain*
- *D. In male gonadal function declines slowly with advancing age, but the fertility persists*
- *E. Androgens and estrogens are normally secreted in both sexes*
- *Answer:B*

- *Which of the following hormones plays an important role in keeping the plasma concentration of potassium within normal limits:*
- *A. Calcitriol*
- *B. Vasopressin*
- *C. Glucagon*
- *D. Insulin*
- *E. Parathyroid hormone*

- *Answer: D*

- *Which one of the following about the mechanism of action of hormones is true:*
- *A. Some hormones of steroid types bind with receptors in the cell membrane in certain conditions*
- *B. Most of the protein hormones have Diacylglycerol and IP3 as a second messengers*
- *C. All amino acids derivatives hormones bind with receptors inside the cells or nucleus*
- *D. Once the hormone binds with the receptors for sure it continuous to proceed functioning*
- *E. All steroid hormones bind always with receptors in the cells or nucleus*
- *Answer: A*

- *PTH has which of the following primary actions:*
- *A. It decreases renal tubular calcium reabsorption*
- *B. It increases bone resorption*
- *C. It increases gastrointestinal calcium absorption*
- *D. It increases 24,25-(OH)₂-vitamin D synthesis*
- *E. It decreases urinary phosphate excretion*

- *Answer: B*

- *The activity of the adrenal zona glomerulosa is stimulated mainly by:*
- *A. Cortisol.*
- *B. Hypernatremia*
- *C. Hypokalaemia*
- *D. Angiotensin II*
- *E. Atrial natriuretic peptide*

- *Answer: D*

- *Insulin: Choose the correct answer:*
- *A. Requirements are increased in obesity*
- *B. Requirements are increased by exercise*
- *C. Requirements of night are similar to those during the day*
- *D. It produces tyrosine kinase a second messenger only*
- *E. Half-life is usually reduced in patients with diabetes mellitus*

- *Answer: A*

- *Triiodothyronine (T3): choose the correct answer*
- *A. Binds to plasma membrane receptors*
- *B. Is all protein bound in the circulation*
- *C. Promotes Growth.*
- *D. Is the only biologically active form of thyroid hormone*
- *E. 90% is formed from thyroxine (T4)*

- *Answer: C*

- *which of the following is not true about menstrual cycle:*
- *Answer: corpus luteum functions tell the end of pregnancy*

- *Wrong, about male if one tests isn't present:*
- *Answer: producing sperms the patient is infertile*

- *which contraceptive method has more than one advantage:*
- *Answer: spiral*

- *wrong about cryptorchidism:*
- *Answer: percentage in premature babies 50%*

- *Which inhibits GH secretion*
- *Answer: somatostatin*

- *What's wrong about calcium metabolism*
- *Answer: it's regulated by PTH & vitamin D ONLY*

- *Incorrect about thyroid hormones:*
- *Answer: both bounded hormone and free hormone have same functions*

- *which of the following false about viagra:*
- *Answer: aphrodisiac drug*

The END