

UNIT 12

Assignment: 2

Hormones are created at a distance from their target cells, and pass through the bloodstream or intercellular fluid until they reach these cells. Once the cells have been reached, the hormones allow the cell to increase or decrease the manifestation of specific genes.

This procedure takes considerably longer, as hormones must first be produced, conveyed to their target cell, and signal or enter the cell. Then, the target cell must go through the process of transcription, translation, and protein synthesis prior the intended action of the hormone is seen.

Although hormones act more slowly than a nervous impulse, their effects are long lasting. Furthermore, target cells can respond to minute quantities of hormones and are delicate to subtle changes in hormone concentration.

The CNS and endocrine system cooperate to maintain homeostasis.

The CNS reacts rapidly to short – term changes by exchanging electrical impulses.

The endocrine system recognises longer – term adjustments by conveying chemical messengers (hormones) into the circulation system

The CNS and endocrine system are connected in three key areas, structure, substance, and function. The endocrine and CNS work parallel with one another and in conjunction FUNCTION in THE MAINTAINING homeostasis, REPRODUCTION AND DEVELOPMENT. Both SYSTEMS are the COMMUNICATION connections of the body and help the body's life SYSTEMS to work accurately and in connection to one another.

Essentially a considerable AMOUNT of the endocrine SYSTEM organs and tissues are established in the CNS, such organs as the hypothalamus and back pituitary are samples of nerve tissues that impact the FUNCTION of an organ and its release of hormones. Not just does the hypothalamus release hormones into the circulatory system, IT ALSO directs the arrival of hormones in the back pituitary organ. Those that are not made of NERVOUS tissue once were. The adrenal medulla is DERIVED from the same cells that create certain ganglia.

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