

Health and stress

Endocrinology II

(Week 12)

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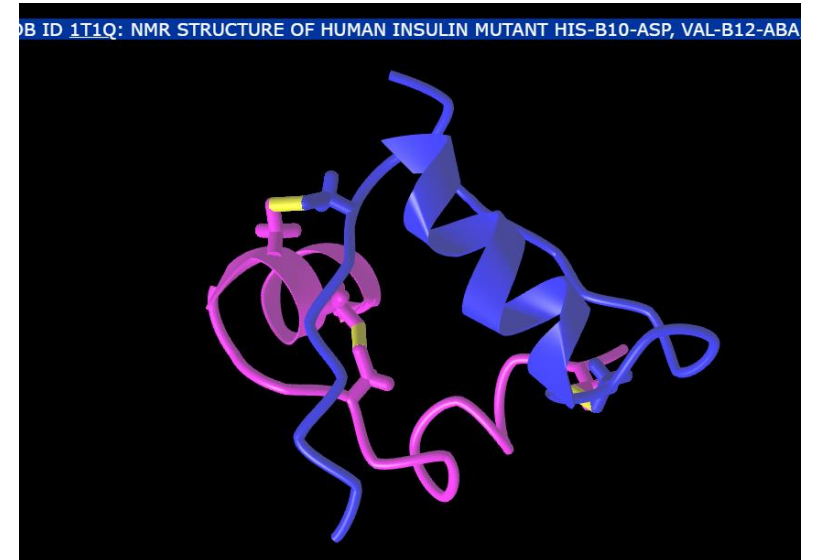
Classification of the major human hormones by their chemical structures* Continue

5. **Pancreatic hormones:** (peptide /Protein)

- Insulin
- Glucagon
- Somatostatin
- Pancreatic polypeptide

6. **Calcium regulating hormones**

- Parathyroid hormone (PTH) (peptide /Protein)
- Calcitonin (CT) (peptide /Protein)
- Dihydroxyvitamin D (Steroid)
- Parathyroid hormone-related peptide (PTHrp) (peptide /Protein)



7. Adrenal cortical steroids: (Steroid)

- Cortisol
- Aldosterone
- Dehydroepiandrosterone

8. Adrenal medullary hormones: (Amino acid or fatty acid derived)

- Epinephrine
- Norepinephrine

9. Male reproductive hormones:

- Inhibin (peptide /Protein)
- Testosterone (Steroid)
- Dihydrotestosterone (Steroid)

10. Female reproductive hormones:

- Inhibin, Oxytocin Human chorionic gonadotropin (hCG) and Human chorionic somatotrophin are peptide /Protein.
- Estradiol and Progesterone are steroid.

10. Plasma volume and sodium regulating hormones:

- **Atrial natriuretic peptide** (ANP), **Arginine vasopressin** and **Renin/angiotensin** are protein/peptides.
- **Aldosterone** (steroid).

11. Cardiovascular hormones:

- Atrial natriuretic peptide (ANP), Endothelins, Erythropoietin and Bradykinin are protein/peptides.
- Nitric oxide (Amino acid or fatty acid derived).... Produces by macrophage

12. **Pineal hormones:** (Amino acid or fatty acid derived)

- Melatonin
- Serotonin

13. **Growth factors or cytokines:** (peptide /Protein)

- Insulin-like growth factors (IGFs)
- Epidermal growth factor (EGF)
- Interleukins (ILs)'
- Tumor necrosis factor (TNF)- α

' Cytokines are classified to lymphokines, interleukins and chemokines. All are small proteins crucial for controlling the growth and activity of other immune system cells and blood cells.

14. **Eicosanoids:**(Amino acid or fatty acid derived)

- **Prostaglandins**
- **Thromboxane**
- **Prostacyclin**
- **Leukotrienes**
- **Lipoxins**

*Note that this mentioned classification is not comprehensive.

Reference

- Stephen Nussey and Saffron Whitehead, 2001, Endocrinology: An Integrated Approach, Oxford: BIOS Scientific Publishers; ISBN-10: 1-85996-252-1.