

Physiological Effects Of Hormones

on Body Function

This is a Story to help Memorize the Points, don't memorize the story just understand it! Points are colored in Red.

After Food Intake, **Digestion** takes Place to break Food into smaller substrates, thus **Transporting The Substrates To Tissue** which leads to **Metabolism**, Metabolism Produces **Reproduction** Hormones necessary for **Growth** and **Behavior**.
Neutrophils, which mediate the body's **Defense Against Pathogens** are abundant in the **Blood Circulation**.
Stress Response

Chemical Classes Of Hormones

Physiology – Lecture 1

	Examples	Size	Solubility Water/Lipid Soluble	Membrane Penetration Of Cell + Nuclear Membrane
Proteins	Many Examples	Large Peptide Hormone: <20 AA Protein Hormone: >20 AA	Water – soluble	Can't Penetrate
A A. Derivatives	Catecholamines Epinephrine, Norepinephrine, Dopamine Thyroid Hormones T4 (aka thyroxine), T3	Small 1-2 AA	Lipid – soluble Except catecholamines = Water Soluble	Can Penetrate Except catecholamine
Steroids	AdrenalCortex H. Cortisol, Aldosterone Sex H. Testosterone, Progesterone, Estrogen Vitamin D	-	Lipid – Soluble	Can Penetrate

-AA = Amino Acid

-H. = Hormone/s

-The Ability To Penetrate the Cell/Nuclear Membrane is affected by the lipid solubility of the Hormone, An Increase in the **Lipid** solubility will increase the ability of the Hormone to Penetrate, while an Increase in the **Water** Solubility will Decrease the Ability to Penetrate.

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Dont Forget Your Prayers