

Stress Gland = Adrenal Gland

- ACTH from the pituitary gland controls the cortex of the adrenal glands.
- The adrenal medulla produces catecholamines (epinephrine) during fight or flight.
- The adrenal cortex requires cholesterol to make steroid hormones.
 - ✦ Adrenal cortex hormones include:
 - Aldosterone
 - Cortisol
 - Sex Hormones (primarily testosterone)

Hormone	Target(s)	Function
Aldosterone	Kidneys, especially the Distal Convoluted Tubule of the Nephrons	Increase Na+ reabsorption/retention
Cortisol	Most Cells	Decrease Inflammation Decrease Immune Activity
	Liver	Increase Glycogenolysis→Increase Blood Sugar
	Adipose Tissue	Increase Lipolysis,→Increase Blood Fatty Acids
Testosterone	Most cells	Masculine style of: hair growth; sex drive; muscle mass; bone density; fat storage; aggression/competition

Cushing's Disease: Too much stimulation of the adrenal glands

- High Blood Sugar (too much cortisol)
- Redistribution of body fat: skinny legs, large belly, fat bump on back of neck (too much cortisol)
- Frequent illness, Poor Healing and/or increased risk of cancer (too much cortisol)
- High BP, accompanied by edema and "moon-shaped" face (too much aldosterone)
- Acne and facial hair (too much testosterone)