GLAND AND LOCATION	HORMONE	ACTION
Pituitary gland, anterior lobe (Base of brain)	Growth hormone	↑ lipolysis ↑ liver gluconeogenesis As intensity of exercise ↑, the [GH] released ↑ Post-exercise promotes muscle growth
Pituitary gland, posterior lobe (Base of brain)	Antidiuretic hormone	Facilitates H_2O conservation during exercise
Thyroid Gland (midline of neck below larynx)	Thyroxine (T_4) Triiodothyronine (T_3)	T_3 & T_4 share similar functions: ↑ BMR ↑ glucose uptake ↑ glycolysis & gluconeogenesis ↑ lipid mobilization As exercise intensity ↑, T_3 & T_4 levels ↑
Adrenal Medulla (atop of each kidney)	Epinephrine and Norepinephrine (catecholamines)	Stimulates sympathetic nervous system ↑ liver & muscle glycogenolysis ↑ lipolysis Training - ↓ Epi & Norepi levels at same Ex. Intensity (i.e., exercise is less stressful)

GLAND AND LOCATION	HORMONE	ACTION
Adrenal Cortex (atop of each kidney)	Cortisol (a glucocorticoid)	Levels altered by stress: ↑ liver gluconeogenesis ↑ glycogen breakdown ↑ lipolysis Anti-inflammatory agent Levels tend to ↑ less in trained subjects
Pancreas (behind/below stomach)	Insulin & Glucagon	<u>Insulin:</u> ↑ glucose uptake in cells ↑ glycogen storage Inhibits liver gluconeogenesis <u>Glucagon:</u> ↑ liver glycogenolysis ↑ liver gluconeogenesis