❖ *Hypothalamic hormones*

	TRH	CRH	GHRH	GHIH
No. AA	Tri-peptide	41	40	14
Synthetic analog	Available		Available	Available (longer t1/2)
Route of transmission	• Oral • IV		SC (subcutaneous)	• SC (Subcutaneous) • I.M (Intra-muscular)
Clinical use	Hypothyroidism		Dwarfism	• Acromegaly • Carcinoid syndrome • Insulinomas, gastrinomas • Esophageal varices • ? Diabetes mellitus
Side effects				• Gall bladder stone formation • Platelet abnormalities
Function	Stimulate synthesis and release of TSH	stimulates synthesis and release of ACTH		↓ secretion of GH, ACTH, TSH, Insulin, Glucagon, Gastrin, Serotonin
Second messenger	• Ca++ (increases PRL) • Phospholipase C --> IP3 and DAG			
Diagnostic tool	TRH test	CRH test	✓	