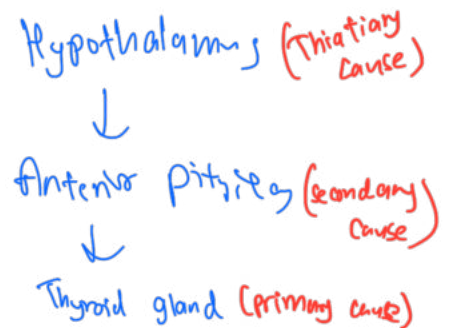


- Dyshormogenesis **Dys hormogenesis**
- Autoimmune gland destruction (Hashimoto thyroiditis)
- Iodine deficiency



## SECONDARY AND TERTIARY CAUSES

- Anterior pituitary failure: Lack of TSH → secondary
- Hypothalamus failure: Lack of TRH → Tertiary

CRETINISM → children @ hypothyroidism condition

- Thyroid deficiency from birth
- Stunting of linear growth: **Dwarfism**
- Mental and physical growth are retarded
- Puffy face, pot belly and large tongue
- A coarse cry, you can recognize them as they are born.

Treatment:-  
(giving T<sub>4</sub>)  
→ prevents mental, physical growth retardation.

## HYPERTHYROIDISM / THYROTOXICOSIS

- Increase of free T<sub>3</sub> and T<sub>4</sub> level in blood
- compare with normal levels Causes:
- **Grave's disease** - Autoimmune condition; Auto antibodies stimulate TSH receptors and antibodies acts like TSH
- Toxic adenoma of thyroid gland
- TSH secreting tumor in hypothalamus

main

BMR → Basic Metabolic Rate

	Hypothyroidism	Hyperthyroidism
General	<ul style="list-style-type: none"> <li>• Decreased BMR / Lethargy (weakness)</li> <li>• Low heat production / Cold</li> <li>• intolerance Weight gain</li> </ul>	<ul style="list-style-type: none"> <li>• Increased BMR Excess</li> <li>• heat production</li> <li>• Weight loss</li> </ul>
GIT	<ul style="list-style-type: none"> <li>• Decreased appetite</li> <li>• Slow gut motility: constipation</li> <li>• Decrease glucose reabsorption</li> </ul>	<ul style="list-style-type: none"> <li>• Increased appetite</li> </ul>