HYPER VS. HYPOTHYROIDISM

Thyroid system

Hypothalamus

Anterior pituitary gland Thyrotropin-releasing hormone (TRH)

Negative feedback Thyroid-stimulating hormone (TSH)

Thyroid gland

Thyroid hormones (T3 and T4)

Increased metabolism
Growth and development
Increased catecholamine effect

Body System	Hypothyroidism	Hyperthyroidism
Metabolic	Hypometabolic Hypoglycemia Cold intolerance Weight gain / Edema	Hypermetabolic 介 Temperature Heat Intolerance Weight Loss
Cardiovascular	Bradycardia Hypotension Anemia	Tachycardia Hypertension Palpitations
Neurological	Lethargy / Fatigue Weakness Muscle aches Paresthesias	Hyperactive reflexes Hand tremor Emotional instability Agitation
Integumentary	Dry skin Loss of body hair	Fine, thin hair
Other	Constipation Goiter	Exophthalmos Goiter
Hormone Levels	↓T3, T4 ↓Free T4 ↑TSH	介 T3, T4 介 Free T4 ↓ TSH

