

The Endocrine System

A group of _____ that secrete substances directly into the _____ . The substances are _____ which are frequently called _____ .

Pituitary gland – this “_____” is located at the _____ of the _____. It produces many hormones which affect other glands.

Thyroid gland – regulates the body’s _____ and controls the levels of _____ in the _____ ; located in _____ of the upper part of the _____ .

Parathyroid glands - _____ small glands, located _____ and _____ the thyroid, that regulate _____ levels.

Adrenal glands – frequently called _____ glands because they’re located _____ each _____. They secrete _____, and epinephrine (_____) and _____, which cause the _____ response.

Pancreas – a _____ organ located behind the _____ that produces _____ and _____ .

Ovaries / Testes - produce hormones that regulate _____ and secondary sex characteristics.

Thymus – located in the upper part of the _____, under the _____. Active _____ in life, it stimulates the _____ system, but then atrophies during _____ .

Pineal - a small, little _____, structure in the _____ .

Placenta - _____, produced during _____. It provides _____ for the developing baby and promotes _____ - _____. It is expelled during delivery (_____).

Gland

Disease

Symptoms/Effects

1. Graves' disease Enlarged thyroid; causes dysphagia and choking
2. Hypoparathyroidism Enlarged bones of hands, feet & face cause a grotesque appearance
3. Addison's disease Small body, short extremities & lack of sexual development
4. Diabetes mellitus Severe hyperthyroidism; causes protruding eyes, irritability, tachycardia, diarrhea, etc.
5. Myxedema Hypercalcemia; could lead to kidney stones & calcium deposits on vessel and organ walls
6. Dwarfism Low blood calcium levels; causes tetany and convulsive twitching which may cause death
7. Cushing's syndrome Excessive growth of long bones and possible mental retardation
8. Goiter Occurs in late childhood or adulthood; causes dry skin, slow pulse, intolerance of cold, etc.
9. Cretinism Increase in blood potassium levels; causes hypotension, dehydration, hypoglycemia, skin "bronzing," etc.
10. Hyperparathyroidism Symptoms include hyperglycemia, hypertension, muscle weakness and obesity
11. Acromegaly Develops in early childhood; leads to mental retardation and a dwarfed stature
12. Giantism Main symptoms include hyperglycemia, excessive urination/thirst, weight loss, slow healing, etc.