**Endocrine Disease Card on 4head Game**

**Cheat Sheet**

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| **Pituitary Giant**- Anterior pituitary released too much growth hormone!  •Often caused by tumors on the AP |
| **Diabetes Insipidus**- too little ADH caused by tumor or injury causes excess release of water-dilute urine |
| **Grave’s disease** - too much hormone AKA –“Hyperthyroidism”  •Metabolism too fast = Skinny |
| **Hashimoto’s disease** - too little hormone AKA “Hypothyroidism”  •Metabolism too slow=Fat |
| **Hyperparathyroidism**-too much PTH released  - Causes increase in blood calcium levels usually leached from bones.  - Leads to weakened bones, depression, fatigue, abdominal pain, kidney stones etc. |
| **Hypoparathyroidism**- too little PTH released  - Causes low blood calcium levels, strong bones but little calcium  - Results in issues with NS, muscle contraction, possible respiratory failure |
| **Addison Disease** -damage to adrenal cortex  –Cortisol, aldosterone and gonadotropin hypo-secretion  –low Na+, high K +, dehydration, low glucose, can be very serious and lead to death,  –Many side effects including hyperpigmentation |
| **Cushing Syndrome**  –Cortisol, hyper-secretion (usually by too much ACTH from pituitary)  –High Na+, low K+, high glucose, water retention, large upper bodies, masculinizing traits in females |
| **Diabetes mellitus (Regular Diabetes)**  – Can’t regulate your blood glucose, not enough insulin to control blood sugar. Incredible thirst and eventual damage to organs. |

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| ***Pituitary Giant*** | ***Hypoparathyroidism*** | ***Hyperparathyroidism*** |
| ***Diabetes Insipidus*** | ***Cushing syndrome*** | ***Hashimoto’s disease*** |
| ***Grave’s disease*** | ***Addison*** | ***Diabetes mellitus*** |

SCENARIO#1

* a PATIENT IS FOUND TO HAVE AN INCREASED AMOUNT OF SUGARS IN THEIR BLOOD
* aDDITIONALY, THE PATIENT HAS A CONTINUAL DESIRE TO EAT AND THE BODY IS ESSENTIALLY STARVING
* tHE PATIENT IS VERY THRISTY ALL THE TIME

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| 1. What disease is this person suffering from? |
| 1. What hormone is responsible for this disorder and what gland is it secreted from? |
| 1. Draw a diagram that shows how the hormones from this gland are regulated. |

SCENARIO #2

* A PATIENT TRAVELS FROM SAN ANSELMO TO PARIS FOR A LOVELY WEEKEND IN FRANCE
* THE PATEINT IS EXHAUSTED WHEN HE ARRIVES IN PARIS AND HAS TROUBLE ENJOYING HIS WEEKEND BECAUSE HE IS SO TIRED

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| 1. What hormone is responsible for regulating cycles of day and night? |
| 1. Where is this hormone secreted from? |
| 1. What is the general function of the gland where the hormone is secreted from? |
| 1. What is believed to stimulate the production of this hormone? |

SCENARIO #3

* A YOUNG CHILD HAS A VERY LOW WHITE BLOOD CELL COUNT WHICH CAN INDICATE VARIOUS IMMUNE ISSUES
* DOCTORS KNOW IT IS RELATED IN THE CASE TO THE ENDOCRINE SYSTEM

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| 1. What gland helps regulate immune functions? |
| 1. What hormone does it release and what structures that relate to immune function are stimulated by this hormone? |
| 1. Where is this gland located in the body? |

STATION #4 - SCENARIO

* A PERSON IS STRANDED IN THE DESSERT WITHOUT FOOD BUT HAS WATER

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| 1. Describe the locations (stores) from which sugars in the body will be utilized. |
| 1. What hormone will be secreted initially to release sugars in response to low blood sugar? |

STATION #5: Create your own Scenario