**Key Hormones Related to the Urinary System -KEY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Hormone****name** | **Source** **(Location it is produced)** | **What it targets** | **Effect it has** |
| **1.****Erythropoietin** | **Kidney** | **Red Bone Marrow** | **Triggers bone marrow to produce more red blood cells (erythrocytes)** |
| **2.****Antidiuretic** **Hormone****(ADH)** | **Hypothalamus of brain** | **Cells along the wall of the Collecting Ducts** | **Makes cells more permeable to water (H2O), which allows more water to be reabsorbed back into the body from what is becoming urine. Blood volume & pressure UP** |
| **3.****Aldosterone** | **Adrenal Cortex of Adrenal Gland** | **Targets Na+ pumps along the distal convoluted tubule** | **Causes the Na+ pumps to turn on to reabsorb more of the Na+ ions from the filtrate back into the peritubular capillary bed. Blood volume & pressure UP** |
| **4.****Renin** | **Cells of the Juxtaglomerular Apparatus** | **Targets arterial walls to constrict and the adrenal cortex to release more Aldosterone** | **Causes arteries to constrict and increased release of Aldosterone. Blood pressure goes UP** |
| **5.****Atrial Natriuretic Hormone (ANH)** | **From the heart's** **Atria** | **Targets the Adrenal Glands and Juxtaglomerular Apparatus** | **Blocks Aldosterone from being released from Adrenal Gland. Also inhibits the release of Renin from Juxtaglomerular Apparatus. Both processes act to prevent reabsorption of Na+. More Na+ ions stay in the nephron along with more water, causing Blood Pressure + Blood Volume DOWN** |