

GLOSSARY

Aldosterone (ALD): Aldosterone is a mineralocorticoid, adrenocortical hormone that possesses a high sodium-retaining ability.

Angiotensin (ANG): Angiotensin is the most powerful vasoconstrictor agent made by the body, and also the most potent direct stimulus for the release of aldosterone by the zona glomerulosa of the adrenal cortex.

Atrial Natriuretic Hormone (ANH): A hormone that is secreted from the atrial tissue of the heart. ANH causes an increase in electrolyte excretion rates and urine volume.

Antidiuretic Hormone (ADH): A hormone that is secreted by the pituitary gland. ADH is involved in controlling body water and osmolality.

Aquaretic (ADH-Antagonist): A category of drugs that are used in the management of patients with water excess and consequent dilutional hyponatremia.

Diabetes Insipidus/Polyuria: The passage of more than 2 liters of dilute fluid through the body. This condition may be due to the failure of ADH release (hypothalamic DI) or failure of the kidney to respond to ADH (nephrogenic DI).

Diuretic: A category of drugs that are used in the management of body fluid disorders such as edema or hyponatremia.

Diuresis: An increased rate of urine, which can be of two types: water diuresis and solute or osmotic diuresis

Euvolemia: Normal blood volume.

Extracellular Sodium Concentration: Amount of sodium contained in one liter of extracellular fluid, usually expressed as mmol or mEq/L.

Glomerular Filtration Rate (GFR): The GFR is the amount of filtrate formed per minute in all nephrons of both kidneys. In the adult male, this rate is about 125 ml/min; in the female about 110 ml/min.

Hypervolemia: Elevated blood volume.

Hypovolemia: Reduced blood volume.

Natriuresis: Natriuresis /osmotic diuresis results when more solute is presented to the kidney than they reabsorb. In contrast to water diuresis, urine flow rate depends upon urinary solute content.

Osmolality: The number of osmoles per liter of water (solvent). The osmole is 1 g molecular weight of a nonionizable solute.

Osmosis: Osmosis is the net diffusion of water across a selectively permeable membrane from a region of high water concentration to one that has a lower water concentration.

Renin-Angiotensin-Aldosterone System (RAAS): The Renin-Angiotensin-Aldosterone system is one of the most powerful regulators of sodium and potassium balance and arterial blood pressure. These three functions are regulated by changes in Angiotensin and Aldosterone levels in response to wide variations in dietary intake of sodium and potassium.

Renin: Renin is a specific enzyme produced in the kidney, which is stimulated by decreases in blood volume and/or pressure.

Urinary sodium concentration: Amount of sodium contained in one liter of urine, usually expressed as mmol or mEq/L.

Water diuresis: The production of a large volume of a dilute urine which results when water ingested or administered is in excess of body requirements.