

A Review on Diuretic Activity Potential of Polyherbal Formulations

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Abstract: *Diuretics are a diverse group of medications widely used in clinical practice to manage various medical conditions, particularly those related to fluid retention and hypertension. This comprehensive review explores the intricate mechanisms of diuretic action, their impact on renal function, and their influence on electrolyte balance. We delve into the core mechanisms behind diuresis, with a focus on sodium reabsorption inhibition as a fundamental process. Beyond sodium, we investigate additional pathways of diuresis, shedding light on the multifaceted nature of diuretic action. Understanding their effects on renal dynamics, glomerular filtration rates, tubular function, and renal blood flow is crucial to appreciate the diuretic effect fully. Electrolyte balance is a critical aspect of diuretic therapy, and we examine how diuretics can disrupt the delicate equilibrium of sodium and potassium, as well as other less-explored electrolytes. Safety and adverse effects associated with diuretic use are thoroughly evaluated, including discussions on safety profiles, potential interactions, contraindications, and strategies for monitoring and managing side effects. In conclusion, this review synthesizes key findings, their implications for healthcare, and future research directions. Diuretics, as enduring tools in medicine, continue to play a vital role, and their optimization remains a shared responsibility among healthcare providers, researchers, and policymakers.*

Keywords: Diuretics, renal dynamics, glomerular filtration rate, tubular function, nephrons, diuretic action.

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