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**Update on the pathophysiology and management of uric acid renal stones.**

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Idiopathic uric acid nephrolithiasis appears to be increasing in prevalence. While it has long been known that low urine pH is associated with uric acid stones, only recently has the pathophysiological basis for this disease emerged. Excessively acidic urine is the decisive risk for uric acid lithogenesis, and patients with diabetes and the metabolic syndrome often hold the company of low urine pH. While association does not imply causation, interesting insights have been made regarding insulin's influence on acid-base physiology. We review recent evidence from both the molecular and clinical realms to underline the importance of [H<sup>+</sup>] in the development and treatment of uric acid nephrolithiasis.