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**Citrate and mineral metabolism: kidney stones and bone disease.**

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Citrate is a weak acid that is formed in the tricarboxylic acid cycle or that may be introduced with diet. In the present paper all the mechanisms involved in intestinal absorption, renal handling and modulation of citrate will be reviewed. The evaluation of plasma citric acid is scarcely used in the diagnosis of human diseases. On the contrary urinary citrate excretion is a common tool in the differential diagnosis of kidney stones, renal tubular acidosis and it plays also a role in bone diseases. Therefore the importance of hypocitraturia will be reviewed with regard to bone mass, urine crystallization and urolithiasis. Finally particular attention will be paid to the incidence of hypocitraturia and to the therapy with citrate salts, both in kidney stone disease and in osteopenia.