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## Review

MINERALS IN THE HUMAN BODY

# Mineral precipitation and dissolution in the kidney

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## Abstract

The formation of kidney stones is a significant human health problem. Calcium minerals are involved in a majority of these stones. Despite much research, the processes involved in stone formation remain poorly understood and, hence, reliable procedures for preventing their formation have yet to be developed. However, recent advances point to some key steps in mineral formation and transformation involving calcium phosphates, which can help to illuminate these issues. A computer model has been developed to express the current status of literature data succinctly and to illustrate that computer modeling is a powerful tool for calculating mineral solubilities and for providing insight into the processes involved. Determining the nature of the initial solid phase of calcium phosphate formed is evidently important.

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