Abstract


Zinc and cardiovascular disease.

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BACKGROUND: Zinc is a vital element in maintaining the normal structure and physiology of cells. The fact that it has an important role in states of cardiovascular diseases has been studied and described by several research groups. It appears to have protective effects in coronary artery disease and cardiomyopathy.

FINDINGS: Intracellular zinc plays a critical role in the redox signaling pathway, whereby certain triggers such as ischemia and infarction lead to release of zinc from proteins and cause myocardial damage. In such states, replenishing with zinc has been shown to improve cardiac function and prevent further damage.

SUMMARY: Thus, the area of zinc homeostasis is emerging in cardiovascular disease research. The goal of this report is to review the current knowledge and suggest further avenues of research.

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