

Abstract

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Zinc and diarrheal disease: current status and future perspectives.

Scrimgeour AG, Lukaski HC.

aUS Army Research Institute of Environmental Medicine, Military Nutrition Division, Natick, Massachusetts, USA bUS Department of Agriculture, Agricultural Research Service, Grand Forks Human Nutrition Research Center, Grand Forks, North Dakota, USA.

PURPOSE OF REVIEW: To evaluate clinical data indicating the benefits of oral zinc supplementation to prevent and/or treat diarrhea in children and extend these findings to adults.

RECENT FINDINGS: Zinc plays an important role in modulating host resistance to infectious agents and reducing the risk, severity, and duration of diarrheal diseases. Zinc is important in the developing world and in low-income and middle-income countries where mild-to-moderate zinc deficiency is highly prevalent. The WHO/UNICEF recommendations for zinc supplementation are based on meta-analyses of randomized, controlled intervention trials on children: 20 mg zinc/day for 10-14 days for children with acute diarrhea and 10 mg/day for infants under 6 months of age. Effective forms include sulfate, gluconate, or acetate. No similar studies have been conducted on adults. Thus, carefully conducted clinical trials are necessary to ascertain the efficacy of zinc in prevention of acute and persistent diarrhea in adults.

SUMMARY: Faced with rising antibiotic resistance and the lack of effective antidiarrheal vaccines, oral zinc provides substantial benefit in the reduction of stool output and disease duration combined with safety, selectivity of action, and low cost. Thus, oral zinc supplementation is a practical therapeutic intervention for the treatment of diarrhea in children, and by extension, should be provided to adults.

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