

## GLOBAL: Low-cost HIV treatment with zinc supplements

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Researchers have demonstrated that long-term zinc supplementation for HIV patients reduced the likelihood of immunological failure and reduced the rate of diarrhoea. The findings were published online in **Clinical Infectious Diseases**.

Lead researcher Marianna Baum at Robert Stempel School of Public Health of the US-based Florida International University and colleagues have carried out a randomised, controlled clinical trial of zinc supplementation to examine its effect in HIV-infected patients.

Zinc is found in protein-rich foods with the highest concentrations in beef, poultry, fish and shellfish. Smaller amounts are found in eggs and dairy products, as well as nuts, seeds and pulses.

"We found that long-term (18 months), zinc supplementation reduced four-fold the risk of immunological failure, and decreased the rate of diarrhoea by more than half, compared with placebo," Baum told *University World News*.

He said that by enhancing immune function, micronutrient supplements provided to HIV-infected individuals could slow HIV disease progression and decrease morbidity associated with the disease.

Micronutrient supplements held promise as low-cost treatments to slow disease progression early in the disease, as well as adjuncts to anti-retroviral medication to reduce morbidity and improve the quality of life of people infected with HIV.

"We have just completed a large clinical trial to determine the effect of micronutrient supplementation on HIV disease progression in patients who are not yet on antiretroviral treatment in Botswana," Baum said.

The study was conducted with the Harvard School of Public Health and the Botswana Harvard AIDS Institute and we are now analyzing the data.

William Moss of the US-based Johns Hopkins School of Public Health welcomed the news.

"This study shows for the first time a reduction in the risk of immunologic failure in HIV-infected adults receiving zinc supplementation, a finding that is particularly striking in that more than half were receiving antiretroviral therapy," Moss told *University World News*.

Previous studies have shown a reduction in the incidence of diarrhoea, a finding also observed in this study.

"The challenge of implementing zinc supplementation is that it has to be given frequently, often daily. However, this may be a way to prepare HIV-infected persons to take daily antiretroviral medications," Moss concluded.