HIV-1 acquisition and disease progression are associated with decreased high-risk sexual behaviour among Kenyan female sex workers.

BACKGROUND: Low serum selenium has been associated with lower CD4 counts and greater mortality among HIV-1-seropositive individuals, but most studies have not controlled for serum albumin and the presence of an acute phase response. METHODS: A cross-sectional study was conducted to evaluate relationships between serum selenium concentrations and CD4 count, plasma viral load, serum albumin, and acute phase response markers among 400 HIV-1-seropositive women. RESULTS: In univariate analyses, lower CD4 count, higher plasma viral load, lower albumin, and the presence of an acute phase response were each significantly associated with lower serum selenium concentrations. In multivariate analyses including all four of these covariates, only albumin remained significantly associated with serum selenium. For each 0.1 g/dl increase in serum albumin, serum selenium increased by 0.8 microg/l (p < 0.001). Women with an acute phase response also had lower serum selenium (by 5.6 microg/l