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Nutritional status of HIV naive individuals in Central South Africa and the effect of nutritional supplementation on their viral load and immune status

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To maintain good health a person needs to consume a well balanced diet. This is even more relevant regarding HIV infection and AIDS. Nutritional status of HIV infected individuals is important as malnutrition is associated with an increased death rate. Chronic inflammation caused by HIV infection increases the metabolic needs of the human body and may lead to the depletion of essential nutrients resulting in a malnourished person with reduced immunity (PubMed). The study determined the baseline dietary intake of 40 HIV infected individuals living in Central South Africa. Dietary intake was determined using a validated Quantitative Food Frequency Questionnaire with a 90% reliability to determine types and quantities of food and drinks consumed by participants during six months prior to data collection. Macro and micronu¬trient intake was assessed with an analytical program (FoodFinder, Medical Research Counsel, South Africa). The median and mean energy and macronutrient intake for both male and female HIV infected individuals were higher than the Estimated Energy Requirement (EER) and Recommended Dietary Intake (RDA) or Adequate Intake (AI). Inadequate intakes of calcium, selenium, folate and iodine were demonstrated. Vitamin A, D, E and K were also compromised with inadequate intakes. The results emphasize the need for nutritional intervention to ensure adequate dietary intake in these HIV infected individuals. Participants received daily selected nutritional supplementation with monthly visits to the clinic. The results show statistical significant decreases ($p<0.0001$) in the median viral load values of the study population and a stable CD4/CD8 count. Therefore nutritional supplementation may delay the onset of AIDS.

Biography

Ernst Vermaak has started his professional career in 1973, working at the Academic Hospital in Bloemfontein, South Africa till 1999 and also received MMedSc degree. He has then worked as Senior Lecturer at the Central University of Technology, Free State and obtained a Research Doctorate for work done on HIV, Nutrition, Immunology and Pulmonary Function.

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