



Dr Paul J van Jaarsveld

Qualifications, University of Stellenbosch: BSc *cum laude* (Majors: Biochemistry and Microbiology), 1982; BSc Hons (Biochemistry), 1983; MSc (Biochemistry) *cum laude*, 1986; PhD (Biochemistry), *The effect of n-3 fatty acid (fish oil) supplementation on plasma low-density lipoprotein composition and metabolism in vervet monkeys (Cercopithecus aethiops) on atherogenic or therapeutic diets*, 1994.

Post-Doctoral Fellowship: Efamol Research Institute, Nova Scotia, Canada between 09/1994-07/1996.

Position: Senior Specialist Scientist; Non-Communicable Diseases Research Unit (NCDRU); South African Medical Research Council (SAMRC).

EXPERIENCE: Dr van Jaarsveld started his research career at the SAMRC in 1987 investigating long-term diet-induced experimental atherosclerosis in non-human primates (vervet monkey) that models human atherosclerosis. He continued with this focus area investigating the influence of different ratios and dosages of an $\omega 6/\omega 3$ fatty acid supplement on the lipoprotein cholesterol and fatty acid profile in vervets on an atherogenic diet; effect of palm oil on the metabolism of plasma lipoproteins and atherosclerosis in vervets consuming high-carbohydrate or high-fat diets; during this time he also participated and contributed to studies investigating undernutrition in communities at risk, particularly the effect of essential fatty acids (EFA) on growth and development and collaborated on studying the relationship between fatty acid status and anaemia in primary school children. When the research unit changed its research focus, he became involved in micronutrient nutrition research and in specific, investigated biofortified staple food crops, such as the β -carotene-rich orange-fleshed sweet potato (OFSP) under the theme interfacing agriculture and health, collaborating with a multidisciplinary team of scientists from the Agricultural Research Council, African countries and HarvestPlus. He has expertise in researching: the food-based approach to alleviate micronutrient deficiencies (especially vitamin A) in vulnerable population groups and has extensively researched South African orange-fleshed sweet potato varieties as a source of pro-vitamin A; the nutrient content of African green leafy vegetables frequently consumed by children and adults in some rural areas of South Africa; and the vitamin A, iron and zinc content of South African fortified maize meal and bread sampled at household level. Recently, Dr van Jaarsveld was appointed and transferred to the newly formed NCDRU where he applies his expertise in nutritional biochemistry and fatty acids.

RESEARCH FOCUS AREAS: The role of essential fatty acids in health and disease; essential fatty acid status of pre-school children and women in relation to lipid profile and anthropometric status over a wide range of dietary intakes; collaborates with scientists from several Universities where essential fatty acids forms part of the project.