Changes in LDL and Total Cholesterol Levels in Response to Supplementation with Concentrated Fruit and Vegetable Powders: Clinical Observations

Shirley Robertson, MD; Mary Elaine Kiener, RN, PhD

- The purpose of this project was to observe the effect of nutritional supplementation with concentrated fruit and vegetable powders in the ongoing case management of patients with hyper-lipidemia.

- Seven patients, each with a long-term history of hyper-lipidemia and heart disease (concurrently being managed with dietary restrictions and lipid-lowering drugs) were invited to supplement their daily diet with encapsulated, concentrated fruit and vegetable powders (*Juice PLUS*™).

- Pre and post supplementation lipid levels were compared for each patient.

- Within a period of 6-10 weeks, all of the patients experienced an improvement in their lipid levels, with an average decrease of 20% in both total cholesterol levels, and LDL levels, along with a 28% improvement in LDL/HDL ratios.

- It appears that nutritional supplementation with concentrated fruit and vegetable powders offers a safe and effective adjunct to lipid-lowering drugs.

- Additional studies are planned to observe their effectiveness as a first course of treatment of hyper-lipidemia, as well as with other chronic health care challenges.

Average change in cholesterol levels after starting Juice Plus (n = 7)

---