

## Effects of Natural Medicines Kalonji, Honey Versus Standard Chemical Atorvastatin on the Blood Lipid Profile of Hyperlipidemic Obese Patients

Farid Mena and Barkat Ali Khan

Department of Internal Medicine and Nanomedicine  
California Innovations Corporation and Fluorotronics Inc., CA, USA

Hyperlipidemia refers to the excess of lipids in the bloodstream, and is characterized by diverse lipid profiles (e.g. hypercholesterolemia, hypertriglyceridemia, familial combined hyperlipidemia) that often lead to undesirable health effects such as obesity.

Randomized controlled clinical trial was conducted to compare the effects of Kalonji and Honey with Atorvastatin (Lipitor®) on the lipid profile of a large cohort of hyperlipidemic patients with moderate to severe central obesity.

Sixty male informed consent patients aged from 35 to 65 years ( $47.40 \pm 9.10$ ) were enrolled for a study period of 30 days. They were randomly divided into three equal groups. Group 1 was treated with 2 g of Kalonji seed; Group 2 was given one tablespoon of pure Honey; and Group 3 was treated with 10 mg per morning day of Atorvastatin. Fasting baseline laboratory values at time 0 (i.e. before treatment) were obtained for all parameters (i.e. TC, LDL-c, HDL-c, TGs) on each subject prior to the study start. The plasmatic parameters were then assessed enzymatically at 15 days and 30 days after treatment, normalized with the baseline values, and the end point values submitted to between-group statistical analyses.

Interestingly, all three medicines significantly lowered ( $p < 0.05$ ) TC, LDL-c, and TGs levels. Conversely, any of the three treatments showed significant increase in HDL-c levels. These effects were improved in a time-dependent manner, except for Honey. Globally, after 15 and 30 days of treatment, the best reduction in TC, LDL-c and TGs levels was obtained with Kalonji. However, Atorvastatin was found more effective on HDL-c levels after 15 and 30 days of treatment.

Thus, comparative effects of Kalonji or Honey with Atorvastatin showed relative and time-dependent effectiveness in reducing TC, LDL, TGs and increasing HDL-c, and suggest that these natural medicines could be used to improve the outcome of adult obese patients suffering from hyperlipidemia. Keywords: Obesity; Hyperlipidemia; Kalonji; Honey; Atorvastatin; Alternative and complementary medicine.

### Biography:

Dr. Mena is an multidisciplinary professional with a holistic concept to solve health issues and biosystems limitations. His strong academic background is completed by many years' experiences in prestigious organizations. In 2009, Dr. Mena was promoted to CSO and R&D&I EVP for Fluorotronics, Inc, USA, where he co-developed and translated an innovative green technology called "SpectroFluor™". In 2013, he successfully organized the 1st world Nanomedicine and Nanobiotechnology Conference <http://www.targetmeeting.com>; 2013). Consultant, Teacher, Event Organizer, Researcher, Reviewer and Editor of reputed journals, including in nutrition, he has also authored more than 100 scientific articles and participated to over 200 scientific events.