

7th International Conference and Expo on

Metabolomics

November 14-16, 2016 Orlando, Florida, USA

Toward establishing the normal range of irisin in biological fluids

Nafez M Abu Tarboush, Yazan M Hassona, Suzan Albdour and Fatima M Al-Akhras
University of Jordan, Jordan

The recently discovered hormone irisin has been described to be a potent myokine which converts white adipose tissue into brown adipose tissue resulting in less body fat mass. On this basis, irisin promises great hopes for the treatment of obesity and diabetes. Recent literature has also promising data which may hold additional benefits for irisin in other metabolic diseases including: metabolic syndrome, dyslipidemia, PCOS, hepatic, renal, and neural diseases, and cancer as well. It is thought that irisin may be the myokine which mediates the huge benefits behind exercise in health and impaired metabolic state as well. Nevertheless, results are few and controversial in determining normal irisin levels. Studies considering irisin are mostly case-control studies with small size subject recruitment. Moreover, ELISA is the detection method for irisin, however sensitivity and intra-assay inaccuracy vary among different producers. Here, we propose a normal range for irisin levels in two biological fluids (plasma and saliva) through recruitment of relatively higher number of healthy subjects and, through utilizing the ELISA kit with the lowest intra-assay inaccuracy. Results are quite convincing for establishing a normal range for irisin in plasma and saliva as well. Levels in saliva are intriguing and require further investigations. Levels of irisin differ significantly with respect to gender, BMI, muscle mass, fat mass, and bone mineral density as well. Fasting irisin levels has been investigated and compared to random levels and a normal range is proposed.

Biography

Nafez M Abu Tarboush is an Assistant Professor of Biochemistry at School of Medicine, University of Jordan, Amman, Jordan. He has completed his DDS at University of Jordan and his MSc and PhD at University of Mississippi Medical Center, MS, USA. His research interest includes cellular and body metabolism, energy production and protein structure-function relationship. He is interested in medical education. He has 10 publications and serving as an Editorial Board Member of two journals.

n.abutarboush@ju.edu.jo

Notes: