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## Effect of Zinc Supplementation on Blood Glucose Levels in Different Age Groups of Type 2 Diabetes

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Studies on humans have revealed the beneficial effects of zinc (Zn) supplementation in patients with type-2 diabetes. Aim: The present study was designed to investigate the effects of zinc supplementation on blood glucose level in type-2 diabetic patients and determine the interaction between age and zinc supplementation on type-2 diabetic patients. Methods: A randomized placebo-control trial conducted in Bashir Hospital of Sialkot, Allama Iqbal Memorial Hospital Sialkot and Civil Hospital of Daska, Sialkot. 144 diabetic patients were selected including an expected drop-out rate of 20%. All the participants were randomly divided into Group 1 (Treatment group with intervention given Zn tablets 20 mg/day) and Group 2 (control group with placebo effect). Each group was further divided into 2 age categories Category 1 (30-50 years of age) and Category 2 (51-70 Years of age). Demographic data, Anthropometric measurements, 24-h dietary recall, serum blood glucose analysis, HbA1C, and serum zinc levels were recorded at the beginning (0 day) and end of the study (60 days). Results: Final fasting serum glucose levels were significantly lowered in group 1 with ( $p < 0.05$ ) as compared to group 2, but interestingly, results were significant ( $p < 0.05$ ) in the older age group (51-70 years) as compared to their younger age counterparts (30-50 years) of group2. A similar trend was also found in the HbA1c, serum Zn levels and BMI of the participants. Conclusion: Results implied the possible phenomenon of better response to Zn supplementation among aged patients as compared to younger counterparts, which may suggest higher Zn demands with advanced age.

### Biography

Ms. Mahwish Aslam had worked as Senior Lecturer in The University of Lahore (UOL), and she also worked as a Consultant Dietitian in the department of UIDNS. She has published more than 8 papers in a well reputed journals and working on many projects.