

A randomized clinical trials of novel supplement formulation for the management of diabetes.

Nazir Ahmad

Govt. College University Faisalabad, Pakistan.

The deficiency of insulin production by pancreas results in high level of serum glucose leading to diabetes. In last 15 years, diabetes casts huge economic burden staggering of 1.0 trillion dollars. Many dietary supplements are proving to be effective in addressing in diabetes. A novel natural product containing garlic extract as key ingredient along with multivitamin and minerals was evaluated in human being with diabetes type 1 and type 2 through randomized control study of 200 patients. The serum samples as tested for fasting blood glucose (FBG), random blood glucose (RBG), hemoglobin A1C (HbA1c) and lipid profile. Participants had consumed daily dose of supplement along with their ongoing medication. Our results show that this formulation significantly changed FBG, RBG, HbA1c and lipid profile. Principal component analysis (PCA) shows positive association between HbA1c and RBG and FBG in diabetes type 1 before and after intervention. However, HbA1c correlation change to negative with FBG and RBG in diabetes type 2 after intervention. Thus, we can conclude that this supplement formulation has positive association with diabetes type 1 and 2 and reverses dyslipidemia.

Keywords: supplement formulation, diabetes, fasting glucose, random glucose, hyperlipidemia

Biography

Nazir is working as associate professor at department of Nutritional Sciences. He hold master and PhD Molecular Biology (Food and Biotechnology Processes) from University of Lorraine, France. His research interests are to study the techno-functional characterization and biological evaluation of bioactive molecules in health and diseases. His research output has significant application in real-world. He has contributed 70 publications in reputed impacted international journals, & 8 book chapters. In very short period, he has completed 2 national research projects as a team member and carrying 2 projects as Principle Investigator, 1 project as Co-Principle Investigator. He has also presented his research work in various conferences, seminars and trainings at national and international levels. He is motivated, hardworking and dedicated young scientist working primarily in domain to promote nutritious, wholesome and safe food among the masses. He is very keen to have the opportunity to interact with scientists and experts.

Received: March 19, 2023; **Accepted:** March 20, 2023; **Published:** September 18, 2023