

3rd International FOOD SCIENCE, PROBIOTICS, NUTRITION & MICROBIOME CONFERENCE November 28-29, 2019 | Kuala Lumpur, Malaysia

Effect of Probiotic Curd (Indian Dahi) Supplementation in the Management of Pre- Diabetes

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Introduction: Diabetes mellitus comprises a group of metabolic disorders that share the feature of hyperglycaemia. It is worldwide in distribution and the incidence of both type 1 and type 2 diabetes is rising dramatically. Globally, diabetes is one of the most common non-communicable diseases leading to mortality and morbidity in many developed countries. The increased risk has been attributed to the high prevalence of multiple atherosclerotic risk factors among diabetic patients. Few studies were found the Lactic Acid Bacteria (LAB) as a treatment for diabetes especially in experimental animals, despite the evidence showing that they have the potential to reduce the incidence of diabetes. This study was conducted to find out the association of dietary pattern and CVD risk factors, among recently diagnosed as Pre- diabetes subjects. This is a hospital based cross-sectional and case-control study with newly diagnose Pre- diabetes, aged 20-50yrs, of both sexes. Out of 75 subjects screened only 24 subjects were recruited as pre diabetes based on their HbA1c values (DCCT-5.7 to 6.5%) from the outpatient department of Osmania General Hospital Hyderabad, India. The various biochemical parameters viz Fasting blood glucose values, HbA1c (glycated Hb) Lipid profile, i.e., Total Cholesterol, Triglycerides and HDL cholesterol were analysed using commercially available kits.

Conclusions: Our results indicate that there were significant changes in the values of HbA1c, Fasting blood glucose, Total cholesterol, Triglycerides etc. upon probiotic supplementation for a period of 30 days in the Pre-Diabetes subjects compared to non-supplemented control group. From this study we could conclude that the probiotic curd supplementation may prevent the progression of Pre diabetes to diabetes mellitus.

Keywords: Probiotics, Diabetes, Pre diabetes, CVD

Biography

Amruth Rao is Scientist- D in the Department of Microbiology & Immunology, National Institute of Nutrition (ICMR), India.

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