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Effect of Supplementation Probiotic Curd (Indian Dahi) in the Prevention of Pre Diabetes to Diabetes Mellites

P. Amruth Rao¹, P. Ramulu² and Kavanashri N.M¹

¹National Institute of Nutrition, India

²Osmania Medical College and Hospital, India

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 mortally and morbidity in many developed countries. The increased risk has been attributed to the high prevalence of multiple atherosclerotic risk factors among diabetic patients. Cardiovascular disease is increased in individuals with type 1 or type 2 DM. In patients with Type-2 DM, cardiovascular disease (CVD) is the major cause of morbidity and mortality. In fact, diabetes is considered as a coronary equivalent, approximately 80% of all deaths and more than 75% of all hospitalization in patients with diabetes is due to CVD.

Objective: To find out the association of dietary pattern and CVD risk factors, among recently diagnosed as Pre- diabetes subjects.

Methodology: This is a hospital based cross-sectional and case-control study with newly diagnose Pre- diabetes, aged 20-50yrs, of both sexes. Out of 50 subjects screened only 16 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, HbA1c (glycated Hb) Lipid profile, i.e., Total Cholesterol, and Triglycerides LDL, VLDL and HD Lcholesterol were analyzed using commercially available kits.

Results: Our results indicate that there were significant changes in the values of 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.

Conclusions: From this study we could conclude that the probiotic curd supplementation may prevent the progression of pre diabetic mellitus over to diabetes mellitus.

Biography:

Dr. P. Amrutha Rao completed MBBS from Gandhi Medical College, Osmania University in 1985. He also completed post graduate diploma in Public Health (DPH) from NTR University of Health Sciences in 1990. He joined in the department of Food and Drug Toxicology Research Centre of NIN in 1993. His area of specialization are, Public Health, Nutrition, Clinical Toxicology, Food Safety, Lathyrism and Food Borne Disease Outbreaks. He also participated in Iodine Deficiency Disorders (IDD) survey in North-East India. He is member of Nutrition Society of India (NSI), Indian Public Health Association (IPHA) and Indian Dietetics Association (IDA). Presented Oral Paper Presentation in Banaras Hindu University, Varanasi on "Lathyrism in South Central India". Presently he is in-charge of Nutrition Unit in Osmania General Hospital. He is also faculty member for MSc (Applied Nutrition) and taking the Students to the Nutrition Ward and explaining the Clinical Signs and Symptoms of Nutritional Deficiency Diseases.