## ICCET 2017

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# 5 INTERNATIONAL CONFERENCE ON UCONTENPORARY ENGINEERING AND TECHNOLOGY = 2017/4

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#### 5<sup>th</sup> INTERNATIONAL CONFERENCE ON "CONTEMPORARY ENGINEERING AND TECHNOLOGY – 2017"

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## 5. HYPOGLYCEMIC AND HYPOLIPIDEMIC EFFECT OF THE SIDDHA MEDICAL PREPARATION 'MATHUMEHA CHOORANAM' IN PATIENTS WITH TYPE II DIABETES MELLITUS

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Diabetes is a chronic disorder in metabolism of carbohydrates, proteins, and fat due to absolute or relative deficiency of insulin secretion with / without varying degree of insulin resistance. It is a disease where the body produces little insulin/ ceases to produce insulin, or becomes progressively resistance to its action. During the last twenty years, the prevalence of diabetes has increased dramatically in many parts of the world and the disease is now a worldwide public health problems. In the Siddha system of Medicine there are several chooranams are used to cure the Mathumeham (Diabetes mellitus). Amoung the chooranams, the Different verities of Mathumeha chooranam are used in Siddha system. Mathumeha chooranam contains Terminalia chebula, Phyllanthus embelica, Murrya keonigii ,and Gymnema sylvestrae. This chooranam is widely used in Siddha Hospitals and Dispensaries of North and Eastern Provinces of Srilanka. The objective of this study was to determine the hypoglycemic and antioxidant activity of the Siddha Medical preparation of MMC in patients with type II diabetes mellitus. 63 subjects of age range between 40 - 70 years with fasting plasma glucose (FPG) between 140-300mg/dl were included in the study. Fasting plasma glucose, glycosylated hemoglobin, lipid profile, renal and liver function test were estimated at baseline and at the end of twelfth week. A paired t-test was used to assess the statistical significance between baseline and final measurements. Paired ttest revealed that the fasting (p<0.001) and HbA1c (p<0.001) significantly reduced after MMC administration. Renal and liver function test were well within the normal range. The results suggest MMC to be beneficial for the treatment of type II diabetes.

KEYWORDS: Diabetes mellitus, Cholesterol, Mathumeha chooranam, [M M C]