

Impact of a native ‘natural spice mixture’ on selected biomarkers, reduction of excess weight in purposely selected overweight/obese females.

M.I. Manuha¹, N.Z. Iqbal², B.M. Nageeb¹, P.A. Paranagama³

The objective of this study is to explore the changes in the body weight and selected biomarkers of overweight/obese women after a four month intervention of native ‘natural spice mixture’. This study was done at National Ayurveda Teaching Hospital, Borella. Volunteers (129) were participated, and BMI and selected biomarkers (lipid profile) were measured before and after intervention. Chi square test revealed that there is a significant weight reduction after the intervention (Chi Square = 36.74, df = 9, p< 0.05). Although there was no participant with a normal BMI before intervention, 7 % of participants have attained normal BMIs after the intervention. The BMI range 25-29.9 (overweight) have increased by decreasing the ranges 30 – 34.9 (Obesity-1), 35 - 39.9 (Obesity-2) and >=40 (Morbid obesity). Before intervention the percentages of ‘High’ and ‘Borderline high’ cholesterol were 17.8 % and 38.8 %, respectively and after the intervention the same were reduced to 7 % and 22.7 %. Before intervention only 43.4 % of the participants were with the normal total cholesterol range, but it increased to 70.3 % after intervention with a significant (p < 0.05) change. Only 6.2 % belonged to the ‘High triglyceride’ category before the intervention and after the intervention it reduced to 2.2 %. Percentage of ‘Optimal’ and ‘Near optimal’ levels of LDLs increased from 17.1 % to 27.6 % and from 28.7 % to 39.4 % after the intervention, respectively. The ‘Borderline’ and ‘High’ levels of LDLs were reduced by 5.8 % and 11.6 % after the intervention, respectively. Study shows that 19.4 % of the participants had ‘low HDL’ before the intervention and it increased to 23.4 % after the intervention. The intervention of ‘natural spice mixture’ revealed the promising effect on weight reduction and rearranged the dyslipidaemia.

Keywords: ‘natural spice mixture’, BMI, lipid profile, obese,

¹Institute of Indigenous Medicine, University of Colombo, Sri Lanka. inulmanuha@yahoo.com, bmnageeb@yahoo.com

²Dietician, Nawaloka Hospital (Pvt) Ltd, Sri Lanka. nooriqbal28@yahoo.com

³Department of Chemistry, University of Kelaniya, Kelaniya, Sri Lanka. priyani.paranagama1@gmail.com