

EFFICACY OF THE INTERVENTION OF NATURAL FOOD ADDITIVES AND MIND CALMING EXERCISES IN THE MANAGEMENT OF FEMALE OBESITY WITH SPECIAL

REFERENCE TO UNANI FOOD GUIDELINES

Submitted by

MUSTAPHA INUL MANUHA

B.U.M.S (Hons), M.Phil (Unani)

FGS/01/01/05/2011/01

A thesis submitted to the Faculty of Graduate Studies, University of

Kelaniya in fulfillment of the requirements for the degree of

Doctor of Philosophy in Food and Nutrition



| පුවේ ශ පුවේශ | 1283 |
|------------------------|------|
| වර්ග ජාත්ය: | |

December 2015

Abstract

Globally prevalence of obesity and overweight lead to non-communicable diseases such as blood pressure, high cholesterol, coronary heart disease and type 2 diabetes mellitus and those diseases increase steadily with increasing body mass index (BMI), a measure of weight relative to height. Determination of the effectiveness of the intervention of 'spice' mixture (SM) prepared using local available natural food addditives and mindcalming exercises (MCE) in the management of female overweight/obesity in the light of Unani food guidelines (UFG) is the main objective of the research. Selected, female volunteers, aged between 18-55 years were divided into two groups. Group 1 was given a SM while Group 2 was given the SM plus MCE and both groups were advised to follow the dietary modification given by the registered dietician as well as in accordance with UFG. The lipid profile, Hb %, SGPT, serum creatinine (SC) and the existence of the obesity-related symptoms were recorded for all the participants before and after the intervention. Among the investigations on rice, SM and lime and lemon, the 'Rathu Nadu' was the best, the SM possessed both anti-inflammatory and antioxidant properties and lime contained more ascorbic acid than lemon. The biomarkers' and obesity-related symptoms recorded before and after the intervention showed a significant difference and the SGPT and SC levels of the study group indicate that the liver and kidney tissues were not impaired by the SM. Both the groups showed significant weight reductions yet Group 2 showed a greater decrement. The causative factors for obesity were unveiled by multiple regression analysis. The findings emphasize a need for implementing a proper intervention to promote physical activity, healthy eating habits with SM and reduce sedentary behaviours to diminish the growing obese population.

Key words: overweight, obesity, 'spice', mind calm exercises, physical activity