Introduction: Prevalence of obesity in the state of Kelantan and Terenngganu, Malaysia were 16.2% and 14.0%, respectively; while the prevalence of overweight were 31.5% and 32.8%, respectively. The objective of this study is to carry out an intervention to combat obesity among government employees in Kota Bharu, Kelantan. Methods: Phase 1: A cross sectional study was conducted among government employees age between 18 to 59 years old, in nine federal ministries and 134 state department offices around Kota Bharu. Data for baseline study was collected from June-December 2014. Phase 2: Respondents whose BMI>27.0 were assigned to three groups [meal substitution (n=135), portion size control (n=76) and control group (75)] in the intervention phase. The Malay validated The Binge Eating Scale, IPAQ, OWQOL/WRSM Questionnaire and Pain Questionnaire were used in this study. The data was analysed by using SPSS version 22. Results: There were 1126 respondents involved in this study. The prevalence of overweight and obesity were 41.1% and 20.9% respectively; while the proportion of binged eaters was 6.9%. The intervention phase is still ongoing for the 20th week. At this stage the attrition rate for meal substitution, portion control, and control groups were 45.6%, 26.3%, and 33.3%, respectively. Proportion of respondents who currently achieved 5% reduction in their body weight among meal substitution, portion control and control groups, were 10.8%, 33.9% and 6%, respectively. Conclusion: Prevalence of overweight and obesity rate among government employees were high, and lifestyle approach to reducing body weight have shown a significant success.