



Effectiveness of Nutrition and Physical Activity Interventions for Weight Management Program at Workplace

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Background

Obesity is one of the health issues that have attracted global attention. The National Health and Morbidity Survey 2019 (NHMS) has showed that 50.1 % of Malaysian adults are either overweight or obese (30.4% overweight and 19.7% obese).

The high levels of overweightedness and obesity among the workforce are associated with an increased risk of sick leave (absenteeism) and reduced productivity.

Methods

The participants ($n = 19$) were selected employees in an electronic factory at Bayan Lepas (Penang, Malaysia) who have fulfilled the inclusion criteria.



Who were the participants?



The weight management program was carried out in the setting of 3 modules. **Body, Mind, and Spirit.**



How was the program structured?



The 3 months' weight management program included nutrition lectures, motivation lectures, exercise session, cooking demonstration, food labeling activities, and food matching activities.



What are the contents of the program?

Methods

Biochemistry blood tests and anthropometric measurements were performed at the beginning of program.



Pre-test



Participants were asked to:

1. Carry out weekly weighing
2. Submit their journals every week into a Google Drive. The journals' content include details of what they've eaten and exercises they've carried out.



Measures



Participants' anthropometric measurements were performed every month. Biochemistry blood tests were performed in the end of the program. Pre and post results were compared.



Post-test

Results

Pre-test



BMI before intervention

27.5 ± 20

Intervention



Post-test



BMI after intervention

26.5 ± 14.8

Results (After 3-month intervention)



Average weight loss

3.4 kg



Average % of body fat loss

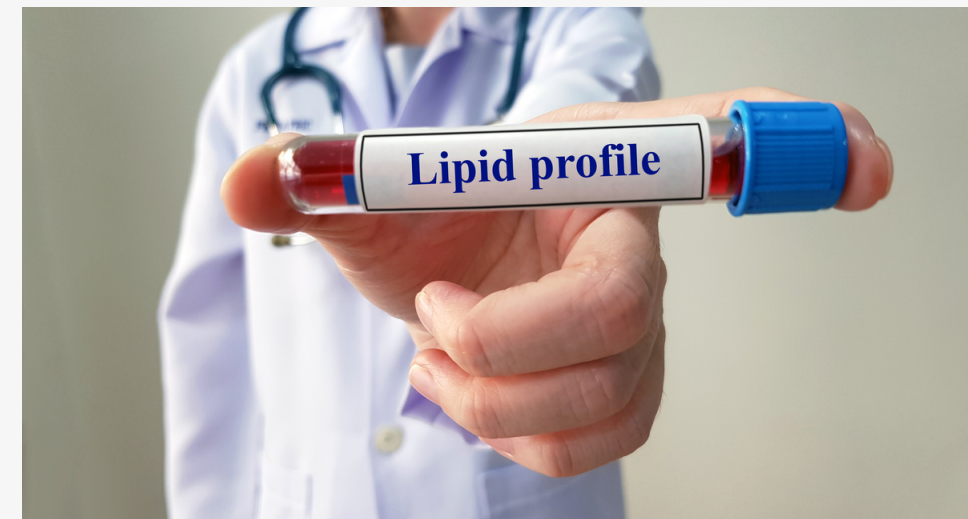
2.65%



Average waist circumference reduction

8.6cm

Results (After 3-month intervention)



84.2%

of participants had a *cholesterol* reduction

63.2%

of participants had a *triglyceride* reduction

94.8%

of participants had a *HbA1c* reduction

Conclusion

A weight management program emphasizing lifestyle and self-monitoring of food intake interventions through small groups and the motivation of peers is considerably important in order to lead to short-term weight losses and healthier behaviors at the workplace.

Relevance to HPH

The standard 4 of a HPH organization addresses staff health needs and health promotion concerning diet and/or nutrition and states that physical inactivity is needed to be assessed in a timely manner. The role of an HPH organization is to strive to bring forward an environment that promotes health.



