Slim Selangor: The impact of a six-week weight loss program on anthropometric measures in Selangor citizens



Introduction

Malaysia stands out as one of the Southeast Asian countries with the highest rates of overweight and obesity, as revealed by the National Health and Morbidity Survey 2019. The projections indicate that by 2030, the prevalence among adults will reach 23.4%. This upward trend in obesity not only poses significant health risks but also exerts a substantial economic burden on the healthcare system. It is worth noting that these calculations exclude the indirect costs associated with obesity. As obesity rates continue to climb, these costs are expected to surge in the coming years. Consequently, addressing obesity becomes a crucial public health priority in Malaysia, particularly among the adult population.

In accordance with this, Slim Selangor is a six-week program aimed at combating the escalating obesity rates in Selangor, introduced by the state government. The primary goals of the initiative encompass equipping individuals with essential information and abilities to embrace a wholesome and active way of life. This encompasses fostering enduring and viable healthy habits among the program participants. Furthermore, the program seeks to actively engage and enlist the participation of Selangor residents in adopting and practicing healthy behaviors. By attaining these objectives, the Slim Selangor program endeavors to make a valuable contribution to the overall well-being and physical fitness of the Selangor community.



The Slim Selangor Program featured Training with Trainers in 42 locations across Selangor, comprising six face-to-face sessions held over six weeks. Additionally, an online platform was utilized for Training without Trainers, leveraging Gmail and live broadcasts on Google Meet. This approach aimed to enhance participants' understanding of exercise techniques while reducing coaching sessions and associated costs. The training included various components such as Home Workouts, Diet Classes, Slimming Training videos, Slimming Classes, Selangor Slim Module, and Diet Menu. Participants could conveniently follow the "just follow" approach of the Home Workout and Lean Training Videos, emulating a complete exercise class within an hour, while considering the recommended order for optimal results and injury prevention.

Participants in the program underwent initial evaluation at four different venues in Selangor to ensure eligibility. The criteria included being adults aged 18 to 50, residing in Selangor, having a high Body Mass Index (BMI), being physically capable, and having no chronic health conditions that could impede exercise or adherence to a healthy diet. After the program, a post-assessment measured changes in crucial health indicators such as waist-hip ratio, BMI, body weight, and body fat percentage. The framework of the module was extracted from the 'Follow The Beat' weight loss program, an innovative concept developed by Coach Sufian Sulaiman. This effective strategy has not only proven its efficacy but has also gained the endorsement of the Malaysian Ministry of Health, which incorporated it into their '10 kg in 10 weeks' health improvement initiative.



Conclusion

The success of the Slim Selangor 2022 in aiding participants to attain their weight loss goals is demonstrated by the noteworthy reduction in waist-hip ratio, weight loss, and decrease in fat percentage. In summary, the aforementioned outcomes serve as evidence of the program's effectiveness. The findings suggest a positive trend towards enhanced overall well-being and a reduction in susceptibility to specific illnesses. The efficacy of the program in attaining these outcomes underscores the significance of an efficacious weight loss program in mitigating the likelihood of ailments linked to obesity.

Results

Post-evaluations were conducted in four locations with a total of 207 attendees. The participants who attended the post-assessment showed significant confidence in the progress they had made toward achieving their weight loss goals. Based on the data obtained, it was observed that 123 out of 207 attendees (59.4%) experienced a significant decrease in waist-hip ratio. Four participants who had previously scored a 1 on their assessments achieved a score of 5 at the end of the program, indicating a lower risk of disease as their waist or abdominal size decreased compared to their hips. Additionally, 128 attendees out of 207 (61.8%) showed weight loss, with the highest weight loss of 7.1 kg achieved by four participants. Most participants achieved a weight loss of at least 3 kg, with only one participant achieving a weight loss of 0.3 kg. Finally, 77 attendees out of 207 (37.19%) achieved a decrease in fat percentage, with the highest recorded decrease being 12.5%.

Discussion

The Slim Selangor 2022 weight loss program effectively reduced waist-hip ratio, weight, and fat percentage among participants. Out of 207 individuals, 123 (59.4%) experienced a significant decrease in waist-to-hip ratios, lowering their risk of diabetes type 2, stroke, and cardiovascular disease. Notably, four participants improved their program score from 1 to 5, indicating reduced disease risk. The program also resulted in substantial weight loss, with 61.8% achieving weight reduction and a maximum loss of 7.1 kg. Decreasing weight lowers the risk of obesity-related conditions like high blood pressure, cardiovascular disease, and diabetes, positively impacting quality of life. Furthermore, 37.19% of participants showed a decrease in fat percentage, with the greatest reduction being 12.5%, enhancing overall body composition and reducing susceptibility to specific illnesses.

The Slim Selangor 2022 program aligns with findings from various weight-loss programs and studies on community health interventions. A study conducted by the National Health and Morbidity Survey in Malaysia showed that structured interventions could lead to substantial weight loss and improvements in obesity-related comorbidities (Institute for Public Health, 2015). Similarly, a systematic review by Johns DJ et al. (2014) reported that community-based interventions can result in moderate weight loss. Internationally, programs similar to Slim Selangor have shown promising results. The Diabetes Prevention Program (DPP) in the United States showed that lifestyle interventions could reduce the incidence of diabetes by 58% over three years (Knowler WC et al., 2002). The program's design shares similarities with Slim Selangor in terms of targeting weight loss and promoting healthier lifestyles, indicating the potential effectiveness of the latter.



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