

A01 Effects of home-based exercise on nutritional status among university students

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Malaysia implemented its first Movement Control Order (MCO) on 18th March 2020 to curb the spread of COVID-19. Outdoor activities become highly challenging while exercise from home became an alternative to maintain an active lifestyle during pandemic. A pre-post, single-arm, quasi-experimental study was conducted to examine the effects of six-week home-based exercise on nutritional status among university students. A total of ten female students from Universiti Malaysia Sabah (UMS) aged between 21 to 23 years old with body mass index (BMI) ≥ 23 kg/m² were involved in this study. Two-point data were collected, first at the baseline and second at the endpoint, after the intervention completed. Data collected includes anthropometric profile (waist circumference, body weight, body fat and BMI) and dietary intake (calorie and macronutrient). Subjects were given exercise interventions from home five times a week, 40 to 50 minutes per session, for six weeks. A paired sample t-test was used to compare mean values of variables before and after intervention. After six weeks, a significant decrease was observed in body weight (mean difference, MD=1.66 kg, $p=0.042$) and BMI (MD=0.72 kg/m², $p=0.038$). However, no changes were observed in waist circumference ($p=0.474$), body fat ($p=0.245$), intake of calorie ($p=0.617$), carbohydrates ($p=0.766$), protein ($p=0.229$) and fat ($p=0.711$). In conclusion, exercising from home for six weeks could impact a subject's weight and BMI. Exercising from home can overcome the challenges related to outdoor physical activity and help people to stay active and healthy.