



Room 3: Saturday, 12 June 2021
Topic: Sport Physiology

Code: ABS- 136

Effects of Tele-Exercise and Nutrition Counseling on Energy and Macronutrient Intake of Obese Employee

Mury Kuswari^{1,*}, Rimbawan¹, Hardinsyah¹, Mira Dewi¹, Nazhif Gifari²

¹Department of Human Nutrition (Post-Graduate), Faculty of Human Ecology, IPB University, Jalan Dramaga Raya, Bogor 16680, Indonesia

²Department of Nutrition, Faculty of Health Sciences, Esa Unggul University, Jl. Arjuna Utara No.9, Jakarta 11510, Indonesia

*Corresponding author: mury@esaunggul.ac.id

Abstract. Long-term exercise does not have the same effect on food intake as short-term exercise, while eventual increase in nutrient intake due to increased physical activity does not follow the same pattern in obese as in lean individuals. Tele-Exercise is a live, online exercise, using internet as a media, while its effects on obese individual, mainly on their energy and macronutrient intake, is largely unknown. This study aims to assess the effect of tele-exercise on obese employees' macronutrient and energy intake. 35 obese employees in Jakarta were recruited for this study. The intervention was two strength exercise, one aerobic exercise per week, and weekly nutrition counseling for 3 months, while their dietary intake was assessed twice per week using 24-hour recall method. The instruments used were PC/Laptop and mobile phone that were connected during the periods of exercise, ZOOM application, and 24-hour recall form. This study showed that there was no significant difference on carbohydrate and protein intake between the start and the end of this study (p-value = 0.527 and 0.651, respectively), while significant decrease was found on their fat and energy intake (p-value = 0.004 and 0.011 respectively). This study suggests that tele-exercise and nutrition counseling is an effective way, especially during this ongoing COVID-19 pandemic, to reduce energy and fat intake (thus reducing obesity) while keeping the protein intake to a certain level for muscle mass maintenance and growth.

Keywords: tele-exercise, macronutrient intake, nutrition counseling, energy intake