## **ABSTRACT**

Firdaus, Ainurrahma Annisaa. 2024. **Analysis of Differences in Body Weight and Suitability of Lunchbox Contents Before and After Nutrition Education on Over-nourished Adolescent Dr. Soetomo Surabaya High School.**Undergraduate Thesis, Departement of Nutrition, Faculty of Health, Universitas Nahdlatul Ulama Surabaya. Supervisor: Dr. Dini Setiarsih, S.P., M.Kes

Overweight and obesity occur in teenagers due to improper eating patterns and lack of physical activity. Nutritional knowledge affect healthy eating behavior indirectly. Nutrition education is needed to increase knowledge and practice of bringing diverse and healthy lunchbox, which can help reduce adolescent weight. This study aimed to analyze differences in body weight and suitability of the lunchbox contents before and after nutrition education among over-nourished teenagers at Dr. Soetomo Surabaya High School.

The research method used a pre-experimental design with a one group pretest-posttest design on weight variable and a one group posttest only design on lunchbox content variable. The sample was 38 respondents with inclusion criteria of nutritional status in category of overnutrition/obesity and willingness to bring lunchbox. The intervention will be given 4 times a month in the form of educational outreach regarding balanced nutrition as well as providing instructions to bring lunchbox according to the visual of the contents of my plate from home. Body weight measurements were carried out at baseline before the intervention and 1 week after the intervention to see changes in body weight. The suitability of the lunchbox contents is monitored using an assessment sheet in 2nd week of intervention. The data analysis used was the Wilcoxon test for weight variables and Friedman for suitability of lunchbox contents.

Results of the research showed that there was a significant difference in the body weight of over-nourished adolescents before and after being given nutrition education with a p value of 0.002. The suitability of the contents of the provisions also increased, but did not show a significant difference over the four observations with a p value of 0.468. Changes in body weight can be influenced by genetic factors, socioeconomic level, eating patterns and physical activity as well as knowledge about nutrition.

Keywords: Nutrition Education, Body Weight, Suitability of Lunchbox contents, Over-nourished, Adolescents