

## **Effects of 4-week supplementation of oat on body mass index, waist-hip ratio and physical fitness performance among overweight university students**

### **ABSTRACT**

Overweight has become a serious health problem around the world and it is necessary to find the best strategic to prevent it. Therefore, the objective of this study was to investigate the effects of oat consumption for four weeks on body mass index, waist-hip ratio and physical fitness performance among overweight university students. A total of 30 subjects (age:  $22.7 \pm 1.9$  years; body weight:  $77.5 \pm 16.6$  kg; body mass index:  $29.8 \pm 4.8$  kg.m<sup>-2</sup>) participated in this study. Subjects consumed oat twice a day for four weeks. Anthropometry measurements such as body mass index and waist-hip ratio were measured at pre and post of four week intervention study. Physical fitness performance tests such as push-up, sit-up and plank were also measured at pre and post of four weeks intervention study. This study found there was a signification reduction in body weight and body mass index between pre and post of four weeks intervention study ( $p < 0.05$ ). Body weight and body mass index decreased by  $1.16 \pm 1.36$  kg (1.50%) and  $0.46 \pm 0.48$  kg/m<sup>2</sup> (1.54%), respectively. However, there was no significant difference in waist-hip ratio between pre and post of four weeks intervention study ( $p > 0.05$ ). For physical fitness performance tests, there were significant improvements in the push-up, sit-up and plank test between the pre and post of four weeks intervention study ( $p < 0.05$ ). This study found that consumption of oat for four weeks was effective in reducing body weight, body mass index and improving physical fitness performance among overweight university students. However, more researches are still warranted to reconfirm these findings at different population and intervention protocols.