

3rd World Congress on

PUBLIC HEALTH, NUTRITION & EPIDEMIOLOGY

November 13-14, 2017 Osaka, Japan

Effectiveness of worksite-based dietary intervention on employees' obesity: A systematic review and meta-analysis**So-Young Kim and Seong-Hi Park**
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The prevalence of obesity among adults, who consist mainly of a working population, has grown rapidly and has been highlighted as a major public health concern. Therefore, this study was designed to provide scientific evidence on the effectiveness of worksite-based dietary intervention to reduce obesity among overweight/obese employees. Electronic search was performed using Ovid Medline, Embase, Cochrane Library and CINAHL databases. The keywords used were obesity, nutrition therapy and worksite. The internal validity of the randomized controlled trials (RCTs) was assessed using the Cochrane's Risk of Bias. Meta-analysis of selected studies was performed using Review Manager 5.3. We identified 7 RCTs with 2,854 participants that fitted our inclusion criteria. The effectiveness of dietary interventions was analyzed in terms of changes in weight, body mass index (BMI), total cholesterol and blood pressure. We observed that weight decreased with weighted mean difference (WMD) of -4.37 (95% confidence interval (CI): -6.54 to -2.20), but the effectiveness was statistically significant only in short-term programs <6 months ($p=0.001$). BMI decreased with WMD of -1.29 (95% CI: -2.88 to 0.29), demonstrating effectiveness, but it was not statistically significant. Total cholesterol decreased with WMD of -5.57 (95% CI: -9.07 to -2.07) mg/dL, demonstrating significant effectiveness ($p=0.002$). Both systolic (WMD=-4.91 mmHg) and diastolic (-3.12 mmHg) blood pressure decreased, demonstrating effectiveness, but with no statistical significance. In conclusion, study results revealed that dietary intervention programs to treat obesity at worksites demonstrated a modest short-term effect on weight loss and total cholesterol reduction.

Biography

So-Young Kim has her expertise in food services. She has been in academia and industry for the last 20 years, pursuing the balance between theory and practice. Her areas of research interests include institutional and commercial food services, food marketing and food culture. Presently, she focuses on promoting healthy food environment and sustainable development in food services.

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