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EFFECT OF INTERMITTENT FASTING IN OVERWEIGHT FEMALES ON WEIGHT LOSS AND METABOLIC BIOMARKERS

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INTRODUCTION
Intermittent fasting (IMF) is an emerging dietary intervention to lose weight. It involves restriction in total caloric intake in a given period. This study examined the effects of IMF on weight loss, metabolic markers, body composition and satiety score in nurses without diabetes in our centre.

METHODOLOGY
Thirty-seven overweight nurses without diabetes were randomly allocated to the experimental (IMF, n=18) or control group (CER, n=19) for 12 weeks. The IMF group was placed on a 5:2 diet (20 to 25% of energy needs on scheduled fasting days). The CER group was prescribed calorie restriction based on body mass index (BMI) and level of physical activity. Repeated-measure ANOVA was used to statistically analyse the data.

RESULTS
The mean age of subjects was 38.9 ± 5.9 years. There was a significant reduction in weight and BMI in the IMF group ($p<0.01$) at the end of 12 weeks. Subjects in the IMF had 5.9% weight loss compared to 2.3% in the CER group. The reduction in fasting insulin and HOMA-IR were greater in the IMF group ($p=0.012$ and 0.022, respectively). There was a modest reduction in fat mass and fat-free mass in the IMF group, but none in the CER. The satiety score was also significantly increased in the IMF group ($p=0.01$).

CONCLUSION
IMF was effective for weight loss and resulted in improvement in insulin resistance in overweight women. Further reduction in weight loss and its sustainability would require long-term follow up.