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*THE EFFECTS OF AN INDIVIDUALIZED DIET AND EXERCISE  
PROGRAM ON BODY FAT LEVELS IN TAIWANESE FEMALES  
AGED 40-60*

A thesis presented in partial fulfillment of the  
requirements for the degree of

Master

In

Nutritional Science

at Massey University, Albany, New Zealand

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2002

## ABSTRACT

Obesity is increasingly common throughout the world and is associated with significant health problems. Middle-aged migrant women are one of the risk groups for obesity. Their body fat levels increase because of their age and menopause experiences. Besides, the change of lifestyle and eating habits after immigration also affects their body fat levels. Recent studies show the combination of diet and exercise may decrease body fat levels. This study is to observe the effects of a short-term diet and exercise intervention on body fat levels in middle-aged Taiwanese women in New Zealand. Thirty Taiwanese women aged between 40-60, who currently live in New Zealand were enrolled in this study. Body weight, height, skinfolds and circumferences were measured before and after the study. Subjects also completed a 24-hr diet recall, three-day diet record and answered a questionnaire to provide general information and an assessment of physical activity levels. Subjects were divided into an intervention group (n=17) and a control group (n=10). In the intervention group, subjects were given a personal diet and exercise program for 9 weeks according to their diet and physical activity levels; subjects in the control group stayed with their own previous diet and exercise habits without any modification. The results of this study showed no significant differences ( $P>0.05$ ) in body weight between both groups. However, body fat levels in the intervention group decreased significantly ( $p<0.001$ ) compared to the control group. It was also found that subjects who had higher initial body weight and BMI, lost more body weight during the intervention. Besides, subjects who were more active during the intervention lost more weight. It was concluded that a short-term diet and exercise interventions might decrease body fat levels in middle-aged Taiwanese women in New Zealand.

## ACKNOWLEDGEMENTS

I would like to thank my supervisor, Patsy Watson (C/O of Institute for Food, Nutrition and Human Nutrition at Massey University), for her valuable assistance to complete this thesis and encourage me greatly.

I also wish to thank Kai-Hong Tan and Jie-Hua Liu (senior student), my good friends who helped me with useful information and suggestions.

To my family, thank for their support and encouragement to be accompany with me till the end of this study.

And to all the Taiwanese women who participated in this study, thank for their patience and kindly cooperation.

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*(E/C): In both English and Chinese Version*