## UNIVERSITI TEKNOLOGI MARA

# PHYSICAL ACTIVITY AND CARDIOVASCULAR RISK FACTORS AMONG NUTRITION AND DIETETICS STUDENTS IN UNIVERSITI TEKNOLOGI MARA PUNCAK ALAM

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Thesis submitted in fulfilment of the requirements for the degree of Bachelor (Hons.) of Nutrition and Dietetics

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### **AUTHOR'S DECLARATION**

I hereby declare that the work in this thesis is by my own except for summaries and quotations which have been duly acknowledged. This thesis has not been submitted to any other academic institutions or non-academic institution for any degree or qualification.

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### **ABSTRACT**

There are many benefits that can be obtained by being physically active. Young adults especially university students are highly encouraged to be engaged in physical activities. Involvement in regular physical activity may not only increase muscle strength but also capacity of exercise. In Malaysia, there is very little study that have been done on physical activity level of university students. Hence, this study is carried out (i) to identify the physical activity level of Nutrition and Dietetics students, (ii) to assess the nutrition status of the Nutrition and Dietetics students which includes the anthropometry measurements, biochemical values as well as the clinical assessment and (iii) to identify the cardiovascular (CVD) risk factors present among the Nutrition and Dietetics students. The overall aim of this study is to determine the relationship between physical activity level and CVD risk factors. Purposive sampling have been used in this study. The data collected for this study were anthropometry data which are height, weight and Body Mass Index (BMI) and boy fat percentage. The biochemical data obtained were fasting blood glucose data and total cholesterol level whilst the clinical data obtained was blood pressure which are the components of the nutrition status. Prior to the data collection, participants were given the long version of International Physical Activity Questionnaire (IPAQ-M) which have already been translated to Malay language. The physical activity data and the nutrition status data were analysed by Statistical Package for the Social Sciences (SPSS) version 21.0. The median value and interquartile range (IQR) of BMI of the participants were 21.49 (5.2). The overall physical activity level of the participants were moderate active. The MET-minutes value for walking reported in median and IQR were 1996.5 (3152) approximately 33 hours, whereas the MET-minutes obtained for moderate-intensity activities were 840.0 (963) approximately 14 hours in a week and vigorous-intensity activities reported were about 40.0 (248) MET-minutes over a week. From the data, only 48% of total participants are at risk of CVD. The relationship between physical activity level and CVD risk factors were analysed using Pearson correlation test. However, there was no significant correlation and enough evidence to prove that relationship exist between the CVD risk factors and physical activity level among the Nutrition and Dietetics students in Universiti Teknologi MARA Puncak Alam.

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