

**APPLICATION OF LINEAR PROGRAMMING IN STUDENTS'
DIET PROBLEM**

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**Thesis Submitted in Fulfillment of the Requirement for
Bachelor of Science (Hons.) Computational Mathematics in the
Faculty of Computer and Mathematical Sciences
Universiti Teknologi Mara**

July 2019

DECLARATION BY CANDIDATE

We certify that this report and the project to which it refers is the product of our own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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ABSTRACT

Nowadays, the prices of everything in Malaysia is steadily increasing due to various factors such as politics, economy, and technological advancements. As such, food, one of our basic needs, has also seen a drastic increase in price. College students are heavily burdened by this matter due to limited budget, since they rely on education loans such as Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN) for their daily expenses. In 2008, more than 60% of Malaysian students are financed by PTPTN (Russayani, 2017). Therefore, students are obligated to spend as minimum as possible every day. Due to this, they tend to neglect healthy eating patterns and consume insufficient nutrients per day. This will cause many complications such as diseases, sicknesses and lack of energy to focus in lectures. Therefore, this project was carried out to help fellow students. A survey was distributed to 100 respondents which are UiTM Kuala Terengganu students to collect information regarding their diet patterns. Information about the menus of the cafe was gathered. Then, the nutritional contents of each menu are referred from the Ministry of Health of Malaysia. Using these data, linear programming models is set up to solve the diet problems and find the minimum cost to satisfy the daily recommended nutrients. The minimum cost diet that is found is RM7.90.

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