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PUSAT PEMBELAJARAN DIGITAL SULTANAH NUR ZAHIRAH

**NUTRITIONAL STATUS AND PHYSICAL ACTIVITY LEVEL AMONG  
OBESITY CHILDREN IN KUALA LANGAT AND SEPANG**

**By**

**KHALIDAH BINTI MAT HUSIN**

**RESEARCH PROJECT submitted in partial fulfillment of the requirements for the  
Degree Bachelor of Food Science  
(Food Service and Nutrition)**

**FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE  
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## DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any degree at University Malaysia Terengganu or other institutions.

  
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KHALIDAH BINTI MAT HUSIN

Date: 21.06.2007

Approved by

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(PUAN KHAIRIL SHAZMIN BINTI KAMARUDIN)

Date:

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## ABSTRACT

This study was carried out to determine the nutritional status and physical activity level among 112 obesity children in Kuala Langat and Sepang. The school-aged children was range from 10 to 12 years old. Questionnaire has been used to collect respondent background information. Anthropometry measurement taken were weight, height, and skinfold thickness include triceps, biceps, suprailiac, and subscapula. 24-hour diet record have been used in order to collect the data of nutritional status. This study showed the greatest frequency among obese children was among 12 years old subjects and Malay ethnicity. Most of their parents working in others sector not include professional sectors, service sectors, and self employed. In general, mode for monthly income range was RM1001 until RM2500, which is 32.1%. While for the parental education level, most of them were SPM holder. Mean of weight was  $62.59 \pm 10.36$  kg and  $61.7 \pm 7.62$  kg in male and female subjects respectively. Height of subjects was  $147.88 \pm 6.53$  cm and  $148.6 \pm 5.8$  cm respectively. The skinfold thickness was indicated the percentage of body fat more than 35% in every aged of subjects. Both male and female subjects showed that the average percentage of Recommended Nutrient Intake (RNI) achieved was over 100% except nutrients such as Calcium, Riboflavin, and Niacin for boys, and Protein, Calcium and Niacin for girls. In terms of calories intake or energy intake, both boys and girls were exceeding the RNI cut point where boys consumed about  $2183.57 \pm 203.87$  kcal per day, while girls consumed about  $2037 \pm 175.6$  kcal per day compared with RNI which is 2180 kcal and 1990 kcal respectively. There were no correlation between nutritional status and socioeconomic status which is  $p > 0.05$ . This study also showed most subjects was physically in light activity (1.45 to 1.5) in both of male and female subjects. Most reason for not consume breakfast was not enough time to eat breakfast (42%). While 29% subjects described that no appetite to take breakfast was one of the factors why they skipped breakfast. The reason of dislike eating in the morning and nobody prepare breakfast for the subjects showed 19% and 8% respectively. Study also showed most of the subjects (67%) consumed fastfood only seldom.



## STATUS PEMAKANAN DAN TAHAP AKTIVITI FIZIKAL DI KALANGAN KANAK-KANAK OBESITI DI DAERAH KUALA LANGAT AND SEPANG

### ABSTRAK

Kajian ini dilakukan bagi menentukan status pemakanan dan tahap aktiviti fizikal di kalangan 112 kanak-kanak obesiti di daerah Kuala Langat dan Sepang. Kanak-kanak yang bersekolah rendah berumur dari 10-12 tahun. Borang soal selidik telah digunakan bagi mengumpul data berkenaan latar belakang responden. Pengukuran antropometri yang terlibat adalah berat, tinggi, lipatan kulit yang merangkumi bisep, trisep dan suprailiak dan subskapula. Borang 24-hour diet recall digunakan bagi mengumpul data berkenaan status pemakanan. Hasil kajian menunjukkan kekerapan tertinggi bagi kanak-kanak obesiti adalah dikalangan kanak-kanak berumur 12 tahun iaitu terdiri daripada kaum melayu. Kebanyakan ibu bapa responden tidak bekerja di sektor professional, perkhidmatan, dan bekerja sendiri. Secara umum, mod bagi pendapatan bulanan adalah diantara RMI001 sehingga RM2500, iaitu 32.1%. Tahap pendidikan kebanyakan ibu bapa responden adalah daripada kelulusan SPM. Min bagi berat adalah  $62.59 \pm 10.36$  kg dan  $61.7 \pm 7.62$  kg bagi lelaki dan perempuan. Min bagi tinggi pula adalah  $147.88 \pm 6.53$  cm dan  $148.6 \pm 5.8$  cm masing-masing. Lipatan kulit menunjukkan kebanyakan subjek mempunyai peratusan lemak tubuh lebih 35% untuk setiap peringkat umur subjek. Kedua-dua subjek lelaki dan perempuan menunjukkan peratus pencapaian pengambilan nutrien adalah melebihi 100% daripada yang disyorkan oleh (RNI) kecuali nutrien seperti kalsium, riboflavin dan niasin untuk kanak-kanak lelaki, dan protein, kalsium dan niasin untuk kanak-kanak perempuan. Bagi pengambilan kalori untuk kedua-dua kanak-kanak lelaki dan perempuan adalah melebihi julat (RNI) dimana kanak-kanak lelaki mengambil  $2183.57 \pm 203.87$  kcal dalam sehari, manakala pengambilan kalori sehari bagi kanak-kanak perempuan pula adalah  $2037 \pm 175.6$  kcal berbanding dengan saranan yang ditetapkan RNI iaitu 2180 kcal dan 1990 kcal masing-masing. Hasil kajian juga menunjukkan tiada korelasi di antara status pemakanan dengan status ekonomi tahap pendidikan penjaga dimana  $p > 0.05$ . Kajian juga menunjukkan tahap aktiviti fizikal subjek adalah pada tahap rendah iaitu (1.45 to 1.5) bagi kedua-dua kanak-kanak lelaki dan perempuan. Secara puratanya, pengambilan sarapan pagi adalah pada setiap hari iaitu (36%). Sebab utama bagi mereka yang tidak mengambil sarapan pagi adalah kerana tidak mempunyai masa yang cukup untuk makan pada waktu pagi (42%), faktor lain adalah tidak mempunyai selera untuk sarapan pagi 29%. Sebab tidak suka makan pada waktu pagi dan tiada siapa yang menyediakan sarapan pagi menunjukkan peratus sebanyak 19% dan 18% masing-masing. Kajian juga menunjukkan kebanyakan subjek mengambil makanan segera adalah kadang kala iaitu (67%).