台北市學齡前兒童的體位與營養素攝取和血液脂質生化的關係

Relationship between Anthropometry, Nutrients Intakes and Serum Lipids among Preschool Children in Taipei

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摘要

研究目的是在探討台北市學齡前兒童的體位、營養素攝取與血液脂質的關係。調查進行於民國 86 年 2 月至 87 年 1 月,受試兒童共 302 位,其年齡從 36 個月到 76 個月,平均值為 62±10 個月,測量學童身高與體重,並收集血樣以供分析。以陳氏的重高指數計算,結果有 36 人≧1.2,約佔 11.9%為肥胖。血清膽固醇的平均值在 170±29 mg/dL,總膽固醇有 139 人(46.0%)>170 mg/dL。有 74 位兒童完成三天的飲食記錄。使用電腦分析軟體分析其飲食中的熱量與三大營養素。就飲食脂肪攝取值>30%是為高脂肪組;反之則為低脂肪組。結果顯示:高脂肪組:熱量 1236±391 仟卡、蛋白質 14.2%、脂質 36.3%、碳水化合物 50.0%、膽固醇值 177±26 mg/dL;低脂肪組:熱量 1001±333 仟卡、蛋白質 13.8%、脂質 26.5%、碳水化合物 60.5%、膽固醇值 174±50 mg/dL。脂質攝取量平均數為 34.4%,中位數在 34.35%都超過 NCEP (National Cholesterol Education Program)的脂質建議量＜30%。以 t-test 檢定高脂肪組和低脂肪組對血液脂質值沒有呈現統計差異性存在。

Abstract

The aim of this study was to investigate the anthropometric and dietary characteristics of preschool children in Taipei in relation to their serum lipids. Three hundreds and two preschool children, aged from 36 months to 76 months with mean age of 62±10 months were included in this study. Children's height and body weight were measured, and blood samples were taken for analysis. The results were as follows: for weight-for-length index, there were 36 children ≥1.2; that meant 11.9% of total children were concluded as obese. As for total blood cholesterol, total of one hundred and thirty nine children (46.0%) were greater than 170 mg/dL. Computer analytic softwares were used to analyze the diet intake of seventy-four preschool children who had completed three days food intake record. Those who had fat intake greater than 30% of total diet were defined as high fat group;

those less than 30% were defined as low fat group. The results were as follows: high fat group: 1236±391 Kcal, 14.2% protein, 36.3% fat, 50% carbohydrate, cholesterol 177±26 mg/dL; low fat group: 1001±333 Kcal, 13.8% protein, 26.5% fat and 60.5% carbohydrate, cholesterol 174±50 mg/dL. Average fat intake was 34.4% with median value of 34.4%; both exceeded the NCEP (National Cholesterol Education Program) recommendation (<30%). As for serum lipids, there was no statistic difference in serum lipid between high fat group and low fat group by using t-test.