Factors associated with dual form of malnutrition in school children in Nakhon Pathom and Bangkok.

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OBJECTIVE: The present study examined the influence of family characteristics and maternal feeding practices on eating behaviors, food consumption and nutritional status of children living in 6 districts of Nakhon Pathom province and 3 surrounding districts of Bangkok.

MATERIAL AND METHOD: One hundred and ninety nine families were enrolled in the present study. Four specific mother-child pair groups were purposively selected: 62 obese child/overweight mother pairs, 49 obese child/normal weight mother pairs, 37 wasted child/overweight mother pairs, and 51 normal weight child/normal weight mother pairs. Anthropometric measurements were performed on all subjects. Biological data, socioeconomic status, maternal feeding practices, as well as eating and lifestyle behaviors of the children were obtained from mothers and children using structured questionnaires and interviews.

RESULT: Most mothers from all groups, 40.8%-62.2%, had a primary education, were non-manual workers, with families containing 4-6 persons per household, and a family income of < or = 20,000 baht per month. Multivariate logistic regression analysis showed that maternal overweight prior to pregnancy (OR11.85, 95%CI 2.16-64.99) child's high birth weight (OR 4.53, 95%CI 1.09-18.73) as well as maternal control over the consumption of high caloric food (OR13.07, 95%CI 4.08-41.86) and large amounts of food consumed by the children (OR12.58, 95%CI 4.30-36.80) were significant factors associated with childhood obesity. Compared to normal weight children, a higher proportion of obese children were not breast-fed and a higher proportion of normal weight mothers controlled the consumption of high caloric food in their obese children. Overweight mothers with wasted children also controlled their children's food intake. Higher proportion of wasted children had a higher snack consumption frequency but lower energy food intake than the normal weight children.

CONCLUSION: Understanding the underlying causes of dual form of malnutrition in the households would have implication for policy makers to address and implement a nutrition action plan. It is suggested that a malnutrition, (under and over-nutrition) prevention program must involve strategies within families that focus on providing nutrition...
education and the powerful guidance to help parents foster appropriate patterns of food choice and eating in their children. Promotion of increased physical activity in children is also essential. These strategies are aimed to promote the optimal child's weight and health.

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