Research **P**aper



Assessment of dietary pattern of OBESE children (8-13 years)

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Correspondence to : VINITA SINGH Department of Food Science and Nutrition, C.S.A. University of Agriculture and Technology, KANPUR (U.P.) INDIA Email:nut09pau@gmail.com ■ ABSTRACT : Usually obesity is due to positive energy balance. That is the intake of calories is more than the expenditure of calories. The weight of the obese children significantly increased with age. 86.0 per cent obese children were consuming fast food only. Out of 86.0 per cent obese children, maximum obese children (89.54 %) were consuming sweets and ice cream and 10.46 per cent were not consuming.

KEY WORDS : Obesity, Fast food, Dietary pattern

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he cause of childhood obesity includes a wide range of factors mostly of genetic biological, behavioral and cultural origin. As our society is increasingly becoming sedentary, the changing life style of the past few decades tops of the list of consecutive factors of obesity. Unhealthy eating habits, like too much consumption of junk food, fried food or non vegetarian food ice cream and aerated beverages coupled with choosing wrong eating times have worsened the problem. Brunner et al. (1998) reported that childhood dietary habits are important because a food culture once adopted is apparently difficult to reverse. knowledge of dietary patterns of our urban school children is important. Several cross-sectional studies in India indicate that the percentage of overweight children in cities is a matter of concern (Ramachandran et al., 2002). Junk food have become the prominent feature of the diet of the school going children throught the world. These are convenience foods and usually characterized as energy dense, low micro nutrient, unhealthy, high in simple sugars, salt, non nutritious and highly palatable.

■ RESEARCH METHODS

An investigation entitled "Assessment of Dietary pattern of obese children (8-13 years)" was carried out in Kanpur city during 2007 objectives necessitated a descriptive survey design and observation. Selections of samples were done by purposive random sampling. The information regarding dietary pattern were obtained by questionnaire cum interview methods.

■ RESEARCH FINDINGS AND DISCUSSION

Table 1 shows that 86.0 per cent respondents were consuming fast foods while 14.0 per cent respondents were not giving preference to the fast foods. Consumption of fast food is directly related to total energy intake and inversely related to diet quality (Ebbeling *et al.*, 2004).

| Table 1 : Distribution of the obese children on the basis of fast food intake | | | | | |
|---|------------------|-----------------------|------------|--|--|
| Sr. No. | Fast food intake | No. of obese children | Percentage | | |
| 1. | Yes | 86 | 86.0 | | |
| 2. | No | 14 | 14.0 | | |
| | Total | 100.0 | 100.00 | | |

Table 2 shows that out of 86 obese children most of the respondents that are 63.95 per cent preferred fried foods, 31.39 per cent respondents preferred snakes while minimum respondents 4.65 per cent preferred fruits and vegetables. Intake of fats and oils were higher than recommendations were noticed by Kumari and Jain (2005). According to Anita

and Abraham (1997) obesity is a result of over consumption of calories and most common cause of over consumption was the easily availability of foods. Popkin *et al.* (2000) reported that the diet shifted towards higher fat and lower carbohydrate content in India.

| Table 2 : Distribution of the obese children on the basis of food preferred | | | | | |
|---|-----------------------|------------|--|--|--|
| Food preferred | No. of obese children | Percentage | | | |
| Fried foods | 55 | 63.96 | | | |
| Fruits and vegetable | 4 | 4.65 | | | |
| Snacks | 27 | 31.39 | | | |
| Total | 86 | 100.00 | | | |

Table 3 reveals that the maximum numbers of respondents (89.54%) were consuming sweets and ice-cream. Augustine and Poojara (2003) observed that 41 per cent of subjects missed their breakfast on week days and it resulted to impaired cognitive ability. It was also seen that high popularity of junk foods, aerated beverages and ice creams were likely to precipitate obesity, being less dense in nutrients and by contributing calories.

| Table 3 : Distribution of the obese children on the basis of sweets and ice-cream consumption | | | | | |
|--|-----------------------|------------|--|--|--|
| Consumption of sweets and ice-cream | No. of obese children | Percentage | | | |
| Yes | 77 | 89.54 | | | |
| No | 9 | 10.46 | | | |
| Total | 86 | 100.00 | | | |

The most commonly liked junk foods were noodles, *pizza, burger, hot dog and cold drink*. It was observed that majority of the subjects *i.e.* 86 per cent obese children were taking cold drink, 25.59 per cent obese children were taking

| Table 4 : Distribution of the obese children on the basis of type of fast food consumption (n=86) | | | | | |
|---|-----------|------------|--|--|--|
| Type of fast food | Frequency | Percentage | | | |
| Burger | 18 | 20.93 | | | |
| Chowmin | 22 | 25.59 | | | |
| Cold drink | 35 | 40.70 | | | |
| Pizza | 3 | 3.48 | | | |
| Pastries | 7 | 8.16 | | | |
| Other | 1 | 1.14 | | | |
| Total | 86 | 100.00 | | | |

chowmin, 20.93 per cent burger and 3.48 per cent were taking pizza. Anding *et al.* (2006) reported that 98 per cent of the subjects took at least one snack daily and it contributed 25

per cent to total energy in their daily diet.

Conclusion:

It can be concluded that 86.0 per cent of the respondents were consuming fast food due to which they were getting obese out of 86 obese children 63.96 per cent obese children were consuming fried food 89.54 per cent obese children were preferring sweets and ice-cream. Out of 86 obese children 40.70 per cent were taking cold drink, 25.59 per cent were taking chow mine.

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REFERENCES

Anding, J.D., Kubena, K.C., McIntosh, W.A. and Wolinksy, I. (2006). Dietary intake and the contribution of snacks among adolescents during summer months. *J. Consumer Studies & Home Econ.*, **22** (3) :131-138.

Anita, F.P. and Abraham, P. (1997). Clinical dietetics and nutrition, Oxford Univ. Press, Delhi.pp. 336-45.

Augustine, L.F. and Poojara, R.H. (2003). Prevalence of obesity, weight perception and weight control practices among urban college going girls. *Indian J. Comm. Med.*, **28**(4):187-90.

Brunner, E. Inequalities in diet and health (1998). In Diet, nutrition and chronic disease: An Asian perspective. London: Smith-Gordon Nishimura 77-94.

Ebbeling, C.A., Sinclaire, K.B., Pereira, M.A., Garcia-Lago, E., Feldman, H.A. and Ludwig, D.S. (2004). Compensation for energy intake from fast food among overweight and lean adolescents. *J American Asso.*, **291** (23) : 2828-2833.

Popkin, B.M., Horton, S., Kim, S., Mahal, A. and Shuigao, J. (2000). Trends in Diet, nutrition status and diet related non communicable diseases in China and India : The Economic Cost of the Nutritional Transitin. *Nutr. Rev.*, **59** : 379-390.

Ramachandran, A., Snehalatha, C., Vinitha, R., Thayyil, M., Kumar, C.K., Sheeba, L., Josepth, S. and Vijay, V. (2002). Prevalence of overweight in urban Indian adolescent school children. *Diabetes Res. Clin/Pract.*, **57** (3): 185-190.
