Caregivers' Perceptions of Children's Weight and Obesity-related Problems

Harsono Budiprananto and Juliet Sio Aguilar

Institute of Pediatrics and Child Health, St. Luke's Medical Center, Quezon City

ABSTRACT

Objective. This study explored caregivers' perceptions of children's weights, eating patterns and activities, and obesity-related problems.

Methods. Self-administered questionnaires were distributed to caregivers of overweight/obese children, aged 3-18 years. Their perceptions of the children's weight status were compared with measured weights and heights from which body mass indices (BMI) were calculated. BMIs in the 85th to 95th percentile and those above the 95th percentile of the World Health Organization Child Growth Reference Standards 2007 defined the terms "overweight" and "obesity," respectively. Agreement between perceived weight status and the actual measurements were determined by Cohen's kappa. The association between caregivers' weight perceptions and the children's actual weight status as well as the association between the children's eating patterns and activities, and their nutritional status were determined by chi-square analysis.

Results. Of the 165 respondents, 78.8% were mothers, 91.5% completed college education. Overall, nearly a third (29.7%) failed to recognize their child as overweight or obese. Nearly half (48.5%) of the 33 respondents with overweight children and a quarter of 132 respondents with obese children perceived their child to be of normal weight. Disagreements between weight perceptions and the nutritional status based on BMIs were statistically significant ($p<0.01$). No significant differences in eating patterns and activities were noted between the overweight and the obese children. Most respondents (84.2%) believed that overweight/obese children may have health problems.

Conclusion. Caregivers of overweight/obese children tend to underestimate the weight status of their children. Recognition of a child's weight problem may be necessary to initiate intervention programs to address overweight/obesity.

Key Words: weight perception, overweight and obesity, body mass index, children, adolescents

Introduction

Childhood obesity is a serious public health problem that has reached epidemic proportions. The prevalence of obesity is increasing with nearly half a billion of the world's population now considered overweight or obese. The global prevalence rates of overweight children and obese adolescents are approximately 10% and 2-3%, respectively.[1] In the United States, the prevalence among children and adolescents aged 6-19 years has tripled since the 1960s, with rates of overweight and obese children and adolescents at 10% and 13-14%, respectively. In Europe, prevalence rates for obesity have been estimated between 14-31%.[2] In Australia, based on the International Obesity Task Force standards, approximately 14-18% of children are overweight while 5-6% are obese.[3]

In other parts of the world, the double burden of malnutrition is observed with protein-energy malnutrition and obesity coexisting and the prevalence of obesity rising. In the Philippines, while the prevalence of undernutrition in children aged under 5 years have declined since the 1990s, a threefold increase in the prevalence of overweight children has been observed with rates increasing from 0.6% in 1990 to 2.0% in 2008. Similarly, overweight prevalence has steadily increased from 0.1% to 1.6% in children 6-10 years old and from 2.4% to 4.6% among adolescents 11-19 years old.[4] In a recent study among 1,026 Filipino adolescents across various socioeconomic classes, the prevalence of obesity was documented at 21%.[5]

The concern over childhood and adolescent obesity has been associated primarily with its significant risks on adult morbidity and mortality.[6] That obesity is initiated early in life has been substantiated in numerous studies. Seventy-nine percent (79%) of obese 10- to 14-year-old children become obese adults.[7] A threefold increase in the risk for obesity has been observed in children with BMI greater than 16 kg/m^2 at age 7 years compared with those with BMIs less than 14.5-16 kg/m^2.[8] Similarly, children whose mothers had high BMIs during pregnancy had more rapid childhood growth and an increased risk for obesity.[8] More recently,

---

Paper was accorded the Young Investigator's Award during the 11th Congress of the Asian Pan-Pacific Society of Pediatric Gastroenterology, Hepatology and Nutrition, September 25-29, 2009, Sheraton Grande Walkerhill Hotel, Seoul Korea.

Corresponding author: Juliet Sio Aguilar, MD, MSc (Birm)
Department of Pediatrics
Philippine General Hospital
University of the Philippines Manila
Taft Avenue, Ermita, Manila, Philippines 1000
Section of Pediatric Gastroenterology
Institute of Pediatrics and Child Health
St. Luke's Medical Center
279 E. Rodriguez Sr. Ave., Quezon City, Philippines 1102
Telephone: +632 6647562, +639175307611
Email: julietsioaguilar@yahoo.com

North American data indicated that preschool children with BMIs in the high-normal reference ranges and those at greater than the 85th percentile were 5-8 times more likely to become overweight by adolescence than those with BMIs less than the 50th percentile. Elementary school children with BMIs greater than the 85th percentile had the odds of 106.9 to continue gaining weight at 12 years old.[9]

Adolescent obesity has also been observed to carry long-term risks (~50-year risk) for adult morbidity and mortality independent of adult obesity status.[10] The most significant problem is the long-term consequence on the cardiovascular system, with obese children having a threefold risk for hypertension than non-obese children.[11] Several studies suggest that obesity in childhood often tracks into adult obesity and its related co-morbidities. Findings of atherosclerotic plaques in young adults have suggested that the early stages of atherogenesis occur in childhood.[12] It is therefore crucial that childhood obesity be addressed early to minimize, if not prevent, the lifelong complications.

Excessive weight gain during childhood is a multifactorial process that involves among other factors, poor diet and exercise habits.[13] Because dietary preferences and physical activity patterns are shaped early in childhood, the practices of parents and/or caregivers are extremely influential. Parents have been shown to be a positive force in child obesity treatment whose involvement in weight reduction programs have resulted in a greater mean percentage of weight loss and lower dropout rates among 6-11 year olds.[14] If caregivers can readily recognize excess weight in children, understand the health risks of obesity, and have a knowledge of healthy eating behavior and obesity-related problems, struggles in obesity control can be minimized if not completely eliminated. Table 1 depicts the conceptual framework of the caregivers' weight perception study on weight control.

Few studies have documented the ability of parents and other caregivers to recognize obesity in children. In a sample of North American parents, low recognition levels of children's overweight status have been observed.[15] Philippine data is meager in this area. The general objective of this study therefore was to determine caregivers' perceptions of childhood obesity. Specifically, this study sought to (1) determine if there was a discrepancy between the perception of caregivers of their child's weight and the actual weight status based on calculated BMIs; (2) establish whether or not the eating patterns and/or extracurricular activities of these children influence the outcome of obesity; (3) ascertain whether or not caregivers consider childhood obesity a risk for physical or emotional health; and (4) identify measures that caregivers have taken to slow down their children's weight gain.

Methods

Study Design and Research Setting

This is a cross-sectional study conducted in the private and service outpatient clinics of an urban tertiary care hospital from September to October 2008, approved by the ethical review panel of the institution.

Subjects

Caregivers of overweight and obese children 3-18 years old consulting at the pediatric clinics were consecutively included in the study. Only one respondent for each of the overweight and obese children were included as subjects of the study. Informed consent was obtained from the subjects prior to the start of the study. The minimum number of subjects required for the study was calculated at 143 using the formula:

$$n = \frac{(Z\alpha)^2 pq}{e^2}$$

where n represents the estimated sample size; Zα is 1.96 representing a 95% level of confidence level; p is 24%, the estimate of the highest prevalence of obesity among children cited in global literature; q is 1-p; and e is 7%, the maximum error deemed acceptable.

Data Collection

The primary data was collected by obtaining the anthropometric measurements of the children as follows:

1. HEIGHT was measured to the nearest 1 cm using a

Table 1. Conceptual Framework of a Caregivers' Weight Perception Study on Obesity Control

Inputs	Assumptions	Outputs	Assumptions	Outcomes	Impacts	Benefits
Profile of caregivers: age, gender, education, socioeconomic status	Criteria for overweight and obesity	Caregivers' perception of weight status of children	Proper recording of survey forms on eating patterns and physical activities of children	Increased awareness on nutritional status of children	Reduced prevalence of overweight and obesity among Filipino children	Healthy children becoming productive adults
Calibrated measuring devices	Training of study assistants			Recognition of health risks of obesity		
Ethical approval from institution	Survey forms on eating patterns and physical activities of children					

tape fixed accurately and vertically on a wall and was taken with the child wearing socks as he/she stood erectly with the occiput, upper part of the back, buttocks and heels against the centimeter rule, the arms hung naturally at the sides, and a flat horizontal board firmly placed over the head. The mean of two measurements was recorded and used for analysis.

2. WEIGHT was measured to the nearest 1 kg using a calibrated weighing scale with the child wearing minimum clothing and without footwear or head gear. The weight was taken without the child holding on to anything for support. The mean of two measurements was recorded and used in the analysis.
3. BMI was calculated for each child based on his/her measured height and weight.
4. NUTRITIONAL STATUS was evaluated using the age- and sex-specific BMI from the World Health Organization Growth Reference Standards 2007 with BMIs in the 85th to 95th percentile considered overweight and those greater than the 95th percentile considered obese. BMIs were chosen as criteria for defining overweight and obesity in this study because of the current practice in the Philippines.

The anthropometric measurements were obtained by more than one study assistant. Inter-observer variability was not obtained.

Additional data was collected through a validated self-administered questionnaire, which included demographic data on the child and the respondent, the child's height and weight, and the relationship of the respondent to the child (Appendix). The questionnaire also included questions addressing the respondents' attitude toward childhood obesity as a health risk, his/her knowledge on their child's eating patterns and physical activities, and his/her perception of the child's weight. The questionnaire was adapted from published research, modified for the local setting, and subsequently pretested.[15] During the actual data collection process, the principal investigator and the study assistants were present to answer potential queries from the subjects.

Data Processing and Analysis

Data was encoded using the Epi-Info Program and SPSS version 10 for Windows. Descriptive and inferential statistics were applied. Frequencies, proportions, and prevalence were computed for obesity. Cohen's kappa was used to determine the agreement between the perceived and actual weight status. Chi-square analysis was performed to determine the association between caregivers' perception of children's weights and their actual weight status based on the BMIs as well as the association between factors affecting the weight of these children (such as eating preferences and outside-school activities) and their actual weight status. A 95% confidence level was considered significant.

Results

A total of 165 parents or other caregivers of children aged 3-18 years old were surveyed concerning their child's weight and obesity-related problems. Mothers constituted the majority of respondents (78.8%); 91.5% of respondents had completed college education (Table 2).

Table 2. Characteristics of the Study Subjects.

Demographic Profile	No.	%
Children's Gender		
Boys	101	61.2
Girls	64	38.8
TOTAL	165	100
Respondents		
Father	20	12.1
Mother	130	78.8
Caregiver	4	2.4
Others (grandparents, aunts, uncles)	11	6.7
TOTAL	165	100
Respondents' Educational Level		
High school graduate	14	8.5
College graduate	126	76.4
Postgraduate	25	15.1
TOTAL	165	100

Caregivers' Perceptions

Nearly half (48.5%) of the caregivers of overweight children and a quarter (25.0%) of the caregivers of obese children in this study perceived their child as having "about the right weight," with a significant overall discrepancy of 29.7% (Table 3) [p<0.01].

Table 3. Comparison of Parental Perception of the Children's Weights with the Nutritional Status Based on Actual BMIs.

Nutritional Status	Parental Perceptions of Children's Weights			
	Normal	Overweight / Obese	TOTAL	% Discrepancy
Overweight	16	17	33	**48.5**
Obese	33	99	132	**25.0**
TOTAL	49	116	165	**29.7**

Chi-square Test: p<0.01

Among the 116 respondents who considered their child overweight/obese, 66.4% cited as their basis the bigger size of their children relative to other children; 42.2% stated that their children ate more in comparison to other children; and 14.7% disclosed that their children ran slower during outdoor activities in contrast to other children. Nearly a fifth (19.0%) only realized the children's weight problem from external sources.

Eating Patterns and Extracurricular Activities

No significant differences were observed between the eating patterns and extra curricular activities of overweight versus obese children (Tables 4 and 5) [p>0.05].

Problems of Overweight Children as Perceived by the Respondents

The majority of the respondents (84.2%) said that overweight children have a potential for obesity-related health problems. Nearly two-fifths (38.8%) identified psychosocial issues as concerns based on their children's sentiments of "not feeling good about him/herself" and the "difficulty making friends at school."

Efforts at and Hindrances to Children's Weight Control

Respondents take conscious effort to control the weight of their children with nearly half of them limiting their children's intake of fast food/street foods or soft drinks. Interestingly, 15.8% of the respondents have not taken any measures at weight management. Major hindrances to weight control include interference of other household members in the child's feeding (33%) and their personal concern over their child's emotional distress expressed as crying (25%). Nearly a third of the respondents said that they do not have any problems at weight control.

Discussion

Crucial in the management of any problem is the recognition of its presence. Failure to detect the existence of obesity makes the problem and its attendant complications almost impossible to address.

In this study, nearly a third of the caregivers did not perceive their child's weight problem and nearly a fifth only noted weight problems after learning of them from external sources. This finding is consistent with the data obtained from the Third U.S. National Health and Nutrition Examination where nearly a third (32.1%) of mothers also reported that their overweight child had "about the right weight."[16]

Table 5. Comparison of Outside-School Activities of Overweight versus Obese Children.

Activities when not at school	Overweight (n=33)	Obese (n=132)	TOTAL	p value
Play outside with brother/sister	13	41	54	0.36 (NS)
Play inside with brother/sister	12	68	80	0.12 (NS)
Watch TV; play computer	21	97	118	0.26 (NS)
Others	2	12	14	0.74 (NS)

The corollary finding that 70% of the total respondents in this study correctly perceived their children as overweight/obese, however, contrasts with the observation among American children in the Chicago area that only 36% of their parents recognized them as being overweight.[15]

In a cross-sectional study among 1,741 Brazilian mother-child pairs with children aged 6-19 years, failure to correctly perceive the child's weight was frequent among the children themselves and their mothers, especially when children were overweight.[17] In a cross-sectional study done in the Philippines among 2,022 adolescents, the correlation between weight perception and the actual BMIs was also poor with obese or overweight subjects perceiving their weights as being lighter.[18] Factors such as the child's gender and ethnicity and the maternal weight have been observed as affecting misperceptions in weight.[19] Such misperceptions seemed to be unrelated to the education and socioeconomic status of the respondent, an observation supported by the current study.

The eating patterns and extracurricular activities of the children in this study did not differ between the overweight and the obese children. While it may be suggested in this

Table 4. Comparison Between Eating Patterns of Overweight and Obese Children.

Eating Patterns	Overweight (n=33)	%	Obese (n=132)	%	TOTAL	p value
How often child eats vegetables and fruits						
Almost every day	10	29.4	24	70.6	34	
Around 3-4 times a week	16	18.6	70	81.4	86	0.46 (NS)
Almost none	4	14.8	23	85.2	27	
Others	3	16.7	15	83.3	18	
How often child eats fast food meals						
Almost every day	1	11.1	8	88.9	9	
Around 3-4 times a week	7	13.7	44	86.3	51	0.42 (NS)
Almost none	6	26.1	17	73.9	23	
Others	19	23.2	63	76.8	82	
How often child eats street foods						
Almost every day	0	0.0	1	100.0	1	
Around 3-4 times a week	2	15.4	11	84.6	13	0.91 (NS)
Almost none	26	20.2	103	79.8	129	
Others	5	22.7	17	77.3	22	
How often child drinks at least 1 glass of soft drinks						
Almost every day	9	22.0	32	78.0	41	
Around 3-4 times a week	8	14.3	48	85.7	56	0.47 (NS)
Almost none	8	20.0	32	80.0	40	
Others	8	28.6	20	71.4	28	

study that the eating patterns and physical activities of children may not be critical factors in the development of obesity, further studies to better quantify the actual calorie count of food consumed are recommended. A comparison between the eating patterns and physical activities of normal children and overweight/obese children may shed light on dietary intervention and exercise programs as strategies for weight control.

The majority of the respondents (84.2%) perceived that obesity has its health-related risks with 38.8% of them anxious about the attendant psychosocial concerns. Weight stigmatization expressed in this survey as "difficulty making friends at school" has been reported as an underlying cause for peer harassment and rejection in school. A trigger for such negative attitudes has been the belief that obese people are to be blamed for their fatness.[20] Conscious efforts at reducing such prejudices especially among adolescents should be underscored.

While 70% of the respondents in this study recognized that their children were overweight/obese, only 50% had taken conscious effort to address the problem. The reasons behind such behavior need to be explored so that appropriate action towards effective weight control can be undertaken. For the nearly 30% of respondents who were unaware of their children's weight problem, strategies to raise public awareness on the increasing problem of obesity should be explored. The value of a healthy lifestyle encompassing good eating habits and regular physical activity cannot be overemphasized.

Realizing the enormous problem of obesity, concerted efforts utilizing all sectors of society to address the problem cannot be stated enough. As parents have been observed as effective agents of change in the treatment of obesity,[14] equipping them and other caregivers with the skill to recognize overweight and obese children and weight-related consequences is a crucial first step in obesity control in children.

Limitations of the study and recommendations for future research

The findings in this study would have been more substantial if the age and gender of the respondents were obtained and if disaggregation of caregivers' weight perceptions by age of the children were possible. The methodology in this study could have been improved if inter-observer variability had been carried out. Further studies on children's own weight perceptions may reveal interesting information when compared with those of parents and other caregivers. A parallel community-based study may further characterize the skills of caregivers in the recognition of weight problems.

Conclusion

This study addresses a growing problem in child and adolescent health. There exists a tendency for caregivers of overweight/obese children to underestimate the weight status of their children. Recognition of a child's weight problem may be necessary to initiate intervention programs to address overweight/obesity.

_____

References

1. Quak SH, Furnes R, Lavine J, Baur LA. Obesity in children and adolescents. J Pediatr Gastroenterol Nutr. 2008; 47(2):254-9.
2. York DA, Rössner S, Caterson I, et al. Prevention Conference VII: Obesity, a worldwide epidemic related to heart disease and stroke. Group I: Worldwide demographics of obesity. Circulation. 2004; 110(18):e463-70.
3. Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. Establishing a standard definition for child overweight and obesity worldwide: international survey. BMJ. 2000; 320(7244):1240-3.
4. Food and Nutrition Research Institute. Seventh National Nutrition Survey. Taguig City: FNRI-DOST. 2008.
5. Chan-Cua S. Validity of body mass index based on self-reported weight and height in estimation of prevalence of overweight and obesity among adolescents. Phil J Pediatr. 2009; 57:23-9.
6. Freedman DS, Mei Z, Srinivasan SR, Berenson GS, Dietz WH. Cardiovascular risk factors and excess adiposity among overweight children and adolescents: the Bogalusa Heart Study. J Pediatr. 2007; 150(1):12-7.
7. Whitaker RC, Wright JA, Pepe MS, Seidel KD, Dietz WH. Predicting obesity in young adulthood from childhood and parental obesity. N Engl J Med. 1997; 337(13):869-73.
8. Eriksson J, Forsén T, Tuomilehto J, Osmond C, Barker D. Size at birth, childhood growth and obesity in adult life. Int J Obes Relat Metab Disord. 2001; 25(5):735-40.
9. Nader PR, O'Brien M, Houts R, et al. Identifying risk for obesity in early childhood. Pediatrics. 2006; 118(3):e594-601.
10. Must A, Jacques PF, Dallal GE, Bajema CJ, Dietz WH. Long-term morbidity and mortality of overweight adolescents. A follow-up of the Harvard Growth Study of 1922-1935. N Engl J Med. 1992; 327(19):1350-5.
11. Sorof J, Daniels S. Obesity hypertension in children: a problem of epidemic proportions. Hypertension. 2002; 40(4):441-7.
12. Woolf N. The origins of atherosclerosis. Postgrad Med J. 1978; 54(629):156-62.
13. Patrick K, Norman GJ, Calfas KJ, et al. Diet, physical activity, and sedentary behaviors as risk factors for overweight in adolescence. Arch Pediatr Adolesc Med. 2004; 158(4):385-90.
14. Golan M, Weizman A, Apter A, Fainaru M. Parents as the exclusive agents of change in the treatment of childhood obesity. Am J Clin Nutr. 1998; 67(6):1130-5.
15. Eckstein KC, Mikhail LM, Ariza AJ, Thomson JS, Millard SC, Binns HJ. Parents' perceptions of their child's weight and health. Pediatrics. 2006; 117(3):681-90.
16. Maynard LM, Galuska DA, Blanck HM, Serdula MK. Maternal perceptions of weight status of children. Pediatrics. 2003; 111(5 Part 2):1226-31.
17. Boa-Sorte N, Neri LA, Leite ME, et al. Maternal perceptions and self-perception of the nutritional status of children and adolescents from private schools. J Pediatr (Rio J). 2007; 83(4):349-56.
18. Chan-Cua S. Body mass index and weight perception of adolescents in selected private and public schools in Metro Manila, Philippines. Master's Thesis in Pediatrics and Child Health. University of the Philippines Manila. September 2008.
19. He M, Evans A. Are parents aware that their children are overweight or obese? Do they care? Can Fam Physician. 2007; 53(9):1493-9.
20. Crandall CS, Schiffhauer KL. Anti-fat prejudice: beliefs, values and American culture. Obes Res. 1998; 6(6):458-60.

APPENDIX

QUESTIONNAIRE ON
PARENTS' PERCEPTIONS OF THEIR CHILD'S WEIGHT AND
OBESITY-RELATED PROBLEMS

1. Child's name *(Pangalan)* : _____
   Age *(Edad)* : _____ year (taon) _____ month (buwan)
   Sex *(Kasarian)* : _____ male (lalake) _____ female (babae)
   Height *(Taas)* : _____ cm
   Weight *(Timbang)* : _____ kg

2. Respondent's relationship to the child *(Kaugnayan sa bata)*:

3. Respondent's education *(Antas ng pinag-aralan)*:
   ___ Less than high school graduate *(Hindi nakatapos ng hayskul)*
   ___ High school graduate *(Nakatapos sa hayskul)*
   ___ College graduate *(Nakatapos ng kolehiyo)*
   ___ Postgraduate degree *(May higit na pag-aaral pagkatapos ng kolehiyo)*

4. What do you consider your child to be? *(Ano sa tingin mo ang inyong anak?)*
   ___ Underweight *(Kulang sa timbang)*
   ___ About the right weight *(Tama sa timbang)*
   ___ Overweight *(Labis sa timbang)*

5. What is the basis for you saying that your child is overweight? (*Ano ang batayan ng pagsasabi na higit sa timbang ang inyong anak?)*
   ___ Somebody told me that my child is overweight. *(Sinabi ng ibang tao sa akin.)*
   ___ My child looks bigger than other children. *(Sa pananaw ko, mas malaki ang aking anak kaysa sa ibang bata.)*
   ___ My child eats more than other children. *(Mas malakas kumain ang aking anak kaysa sa ibang bata.)*
   ___ During outdoor activities, my child usually run slower than other children.
   (Mas mabagal tumakbo ang aking anak kaysa sa ibang bata)
   ___ Others, specify _____ *(Ibang kasagutan)*

6. How often in a week does your child eat vegetables or fruits? (*Gaano kadalas sa isang linggo kung kumain ang inyong anak ng gulay o prutas?)*
   ___ Almost every day *(Halos araw-araw)*
   ___ Around 3-4x per week *(Tatlo o apat na beses isang linggo)*
   ___ Almost none (*Halos hindi siya kumakain ng ganitong pagkain)*
   ___ Others, specify _____ *(Ibang kasagutan)*

7. How often in a week does your child eat fast food meals (Jollibee, McDo, KFC, etc.)?
   (Gaano kadalas sa isang lingo kung kumain ang inyong anak ng madaliang nabibili na pagkain?)
   ___ Almost every day *(Halos araw-araw)*
   ___ Around 3-4x per week *(Tatlo o apat na beses isang linggo)*
   ___ Almost none (*Halos hindi siya kumakain ng ganitong pagkain)*
   ___ Others, specify _____ *(Ibang kasagutan)*

8. How often in a week does your child eat street food (fish ball, calamares, kwek-kwek)? (*Gaano kadalas sa isang linggo kung kumain ng pagkaing nabibili sa kalsada kagaya ng fish ball, calamares o kwek-kwek ang inyong anak?)*
   ___ Almost every day *(Halos araw-araw)*
   ___ Around 3-4x per week *(Tatlo o apat na beses isang linggo)*
   ___ Almost none (*Halos hindi siya kumakain ng ganitong pagkain)*
   ___ Others, specify _____ *(Ibang kasagutan)*

9. How often in a week does your child drink at least one glass of soft drinks (coke, iced tea, tetra pack juices, etc)? *(Gaano kadalas sa isang linggo uminom ng kahit isang basong "soft drinks" ang inyong anak?)*
   ___ Almost every day *(Halos araw-araw)*
   ___ Around 3-4x per week *(Tatlo o apat na beses isang linggo)*
   ___ Almost none (*Halos hindi siya umiinom ng ganitong inumin)*
   ___ Others, specify _____ *(Ibang kasagutan)*

10. What are your child's activities when not in school? *(Ano ang ginagawa ng inyong anak kapag wala sa eskwela?)*
   ___ Plays outside with his/her brothers, sisters or friends *(Naglalaro sa labas kasama ang kanyang mga kapatid o kaibigan)*
   ___ Plays inside with his/her brothers, sisters or friends
   (Naglalaro sa loob ng bahay kasama ang kanyang mga kapatid o kaibigan)
   ___ Watches television, plays computer or play station *(Nanonood ng TV, naglalaro ng kompyuter o play station)*
   ___ Others, specify _____ *(Ibang kasagutan)*

11. What problems do you think an overweight child might have? *(Ano sa palagay ninyo ang mga problema ng isang batang sobra ang timbang?)*
   ___ Not feeling good about him/herself *(Hindi magandang tingin sa kanyang sarili)*
   ___ Health problems (heart disease, hypertension, diabetes) when older
   (Karamdaman kagaya ng sakit sa puso, hay blad at dyabetes)
   ___ Difficulty making friends at school *(Hirap makipagkaibigan sa eskwela o magkaroon ng kaibigan)*
   ___ Others, specify _____ *(Ibang kasagutan)*

12. What have you tried to do to control your child's weight? *(Ano ang nasubukan ninyong gawin para makontrol ang timbang ng iyong anak?*
   ___ Nothing because I don't think my child is overweight.
   (Wala dahil sa aking palagay ay hindi naman sobra ang timbang ng aking anak.)
   ___ Lesser intake of fastfood and/or street food
   (Bawasan ang pagkain ng madaliang nabibili ng pagkain o pagkaing nabibili sa kalsada)
   ___ Lesser intake of soft drinks *(Bawasan ang pag-inom ng "soft drink.")*
   ___ Involve my child in physical activities. *(Isali ang aking anak sa mga gawaing pisikal o pagkikilos.)*
   ___ Others, specify _____ *(Ibang kasagutan)*

13. What are the hindrances you had in helping control what your child eats? *(Ano ang naging sagabal ninyo sa pagkontrol ng kinakain ng inyong anak?*
   ___ I have no problems. *(Walang ako naging problema.)*
   ___ My child is cared for by a babysitter *(May ibang nag-aalaga sa aking anak.)*
   ___ Other household members feed my child without my knowledge.
   (Mga kasama ko sa bahay ang nagpapakain sa aking anak ng hindi ko nalalaman.)
   ___ My child cries if I don't give him/her what he/she wants.
   (Umiiyak ang aking anak kapag hindi binibigay ang kaniyang gusto.)
   ___ Others, specify _____ *(Ibang kasagutan)*

Thank you very much for your participation.
(Maraming salamat sa inyong pagsasali sa proyektong ito.)

Note: "Almost every day" refers to more than "3-4x per week" but less than "every day." "Almost none" means less than "3-4x per week."