

**Reading Nutrition Labels by Parents of Pre-K Students**  
**Education Program**

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## 1. Introduction

The childhood obesity epidemic in America is a national health crisis.

Obesity is defined as having excess body fat. Overweight and obesity are the result of “caloric imbalance”—too few calories expended for the amount of calories consumed—and are affected by various genetic, behavioral, and environmental factors. Because body fat is difficult to measure directly, obesity is often measured by body mass index (BMI). Adults with a BMI between 25.0 and 29.9 are considered overweight, those with a BMI of 30 or more are considered obese, and those with a BMI of 40 or more are considered extremely obese. [1] For children and adolescents, these BMI categories are further divided by sex and age because of the changes that occur during growth and development. Growth charts from the Centers for Disease Control and Prevention (CDC) are used to calculate children’s BMI. Children and adolescents with a BMI between the 85th and 94th percentiles are generally considered overweight, and those with a BMI at or above the sex-and age-specific 95th percentile of population on this growth chart are typically considered obese. [2], [3]

Childhood obesity has both immediate and long-term effects on health and well-being. Obese children have a higher risk of developing cardiovascular disease (high cholesterol and high blood pressure), type II diabetes, cancers, bone and joint problems, sleep apnea as well as psychological problems, low self-esteem and depression. [4]

Former Surgeon General Richard Carmona’s warning sounds very powerful “Because of the increasing rates of obesity, unhealthy eating habits, and physical inactivity, we may see the first generation that will be less healthy and have a shorter life expectancy than their parents.” [5]

Clearly, poor diet plays a major role in the growing epidemic of obesity. Parents obviously play the most important role in providing and encouraging a healthy diet for their children, and with the continuing rise in childhood obesity, this role is becoming increasingly vital for the future health of the children.

## 2. Assessment

According to the data published in National Health and Nutrition Examination Survey (NHANES), 16.9% of children and adolescents aged 2–19 years are obese. Among preschool children aged 2–5 years, obesity increased from 5.0% to 12.1% between 1976–1980 and 2009–2010. [6] The number of adolescents who are overweight has tripled since 1980 and the prevalence among younger children has more than doubled.” [7]

It is clear that the most important strategies for preventing obesity are healthy eating behaviors, regular physical activity, and reduced sedentary activity. Parents and caregivers can help prevent childhood obesity when they are aware of caloric count in meals and snacks that they provide for their children. Seeing their parents reading food labels can help modeling healthful eating habits in children.

For our program we chose to educate 90 parents of three pre-K classes of P.S. 64 located in Brooklyn, NY.

To determine community needs we used data published in “Student Weight Status Category Report: 2008-2010 Exclusive to NYC” to determine the trend of childhood obesity in NYC. The report identifies 13% of pre-K children in NYC as being overweight and 13% as being obese. [8]

School principal granted us a permission to implement our program and introduced us to the teachers of pre-K students. Questionnaire were given to the teachers and were sent out to each participating parent in their children's homework folder. A parental consent to measure children's BMI by school nurse was sent as well. Seven days were given to return the questionnaires. The return rate of both questionnaires and signed consent forms was 100%. Based on the data collected from the questionnaires we learned that 10 out of 90 parents are able to read food label correctly. Also, we collected information provided by the school nurse which indicated that 12% of pre-K students of P.S. 64 are overweight and 8% are obese.

The information gathered led us to believe that educating parents of P.S. 64 will be beneficial in our attempt to battle childhood obesity.

1. [http://www.nhlbi.nih.gov/guidelines/obesity/ob\\_gdlns.pdf](http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf)
2. [http://www.letsmove.gov/sites/letsmove.gov/files/TaskForce\\_on\\_Childhood\\_Obesity\\_May2010\\_FullReport.pdf](http://www.letsmove.gov/sites/letsmove.gov/files/TaskForce_on_Childhood_Obesity_May2010_FullReport.pdf)
3. [http://www.cdc.gov/growthcharts/clinical\\_charts.htm](http://www.cdc.gov/growthcharts/clinical_charts.htm)
4. <http://www.cdc.gov/healthyyouth/obesity/facts.htm>
5. <http://www.surgeongeneral.gov/news/testimony/childobesity03022004.html>
6. [http://www.cdc.gov/nchs/data/hestat/obesity\\_child\\_09\\_10.pdf](http://www.cdc.gov/nchs/data/hestat/obesity_child_09_10.pdf)
7. [http://aspe.hhs.gov/health/reports/child\\_obesity/](http://aspe.hhs.gov/health/reports/child_obesity/)
8. [http://www.health.ny.gov/prevention/obesity/statistics\\_and\\_impact/docs/2008-2010\\_student\\_weight\\_status\\_category\\_rpt.pdf](http://www.health.ny.gov/prevention/obesity/statistics_and_impact/docs/2008-2010_student_weight_status_category_rpt.pdf)