

## Study of the Influence of Non Genetic Factors Affecting over Nutrition Students in Ayutthaya Province, Thailand

**Authors :** Thananyada Buapian

**Abstract :** Overnutrition is emerging as a morbid disease in developing and Westernized countries. Because of its comorbidity diseases, it is cost-effective to prevent and manage this disease earlier. In Thailand, this alarming disease has long been studied, but the prevalence is still higher than that in the past. Physicians should recognize it well and have a definite direction to face and combat this dangerous disease. Rapid changes in the tremendous figure of overnutrition students indicate that genetic factors are not the primary determinants since human genes have remained unchanged for a century. This study aims to assess the prevalence of overnutrition students and to investigate the non-genetic factors affecting over nutrition students. A cross-sectional school-based survey was conducted. A two-stage sampling was adopted. Respondents included 1,850 students in grades 4 to 6 in Ayutthaya Province. An anthropometric measurement and questionnaire were developed. Childhood over nutrition was defined as a weight-for-height Z-score above +2SD of NCHS/WHO references. About thirty three percent of the children were over nutrition in Ayutthaya province. Stepwise multiple logistic regression analysis showed that 8 statistically significant non genetic factors explain the variation of childhood over nutrition by 18 percent. Sex is the prime factor to explain the variation of childhood over nutrition, followed by duration of light physical activities, duration of moderate physical activities, having been breastfed, the presence of a healthy role model of the caregiver, number of siblings, birth order, and occupation of the caregiver, respectively. Non genetic factors, especially the subjects' demographic and physical activities, as well as the caregivers' background and family environment, should be considered in viable approach to remedy this health imbalance in children.

**Keywords :** non genetic factors, non-genetic, over nutrition, over nutrition students

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020