# Table of Contents

| Name of The Contents | Page No. |
|---|---|

# List of Tables

# List of Figure

# List of Abbreviations

| Abbreviation | Elaboration |
|---|---|
| DD | Dietary Diversity |
| WHO | World Health Organization |
| HFS | Household Food Security |
| IYCF | Infant and Young Child Feeding |
| MUAC | Mid-Upper Arm Circumference |
| SD | Standard Deviation |
| SPSS | Statistical Package for the Social Sciences |
| BMI | Body Mass Index |
| % | Percentage |
| n | Number |

# Abstract

**Background:** Dietary diversity refers to the increased consumption of a variety of foods from different food groups that can ensure an adequate intake of essential nutrients that can promote health, physical and mental development. Dietary diversity (DD) has been used as an indirect indicator of nutritional quality and nutrient sufficiency. **Aim:** The aim of this study was to explore the prevalence of children nutritional status and DD score and associated factors of socio-demographic and other characteristics. **Methods:** A community based cross-sectional study was conducted with 307 households from Chakaria, Boalkhali and Raipura upazila of Bangladesh. Children DD score was assessed by consuming seven food groups. Mid upper arm circumference (MUAC) was measured for the assessment of child nutritional status. Kruskal-Wallis and Mann-Whitney tests were used to evaluate the significance predictors. Spearman rank correlation was used to test significant association between children DD score and food security. **Results:** The mean children DD score was 4.49 (SD 1.47). The prevalence of inadequate and adequate children DD score was 20.3% and 79.7% respectively. The average MUAC of the children was 149.6 mm (SD 15.45 mm). More than three fourth (84.2%) of the children was normal and 15.8% of them was under normal nutrition. The relationship between children DD score and food security was significantly positively correlated ($r_s$ =0.29, p-value < 0.01). The most consumed food groups were vitamin A rich fruits and vegetables (79.70%) followed by flesh foods (73.05%) and grains, roots and tubers (69.53). Family income and fathers' education were significantly associated with children DD score. **Conclusions:** More efforts are needed to encourage people to eat a wider variety of foods in order to improve nutrition and alleviate malnutrition. Improving household socioeconomic conditions may help to improve the practice of food diversification.

**Keywords:** Children dietary diversity, feeding practice, mid upper arm circumference, food groups, Bangladesh