Undernutrition increases the risk of illness and death in children

- Undernutrition is the single most important contributor to child mortality.
- Malnutrition is associated with an estimated 50% of childhood deaths.
- Recent studies demonstrate that underweight children have 2.74% higher risk of dying.

Stunting caused by undernutrition can lead to low progression in life

- Children stunted before the age of 5 are more likely to underperform in school.
- Stunted children have a higher risk of repeating grades.
- Stunting in children has a negative impact on their productivity later in life.

**Effects of Child Undernutrition on Productivity, Health, and Education**

- **Out of 136,671 children under 5 in Kitui:**
  - 25.1% are stunted
  - 4.9% are wasted
  - 13.9% are underweight

The economic impact associated with underweight and stunted children is significant with far reaching effects on:

- **Productivity**: The current workforce has been impacted by increasing child mortality rates and reduced adult productivity.
- **Health**: Increased child illness and death from undernutrition can strain already limited health resources.
- **Education**: Most stunted people of working age in Kitui have not completed primary school.

276 million KSh (1.95 million USD); 0.27% of GCP estimated amount lost in Kitui county in 2022 due to undernutrition

**Cost-Effectiveness of MSN Interventions and Investments**

- **Total Cost for 5 years**: 3.67 billion KSh (35.27 million USD) cost of county interventions (2023-2027)
- **Projected Health Cases Averted**:
  - 1,176 cases of stunting
  - 315 child deaths
  - 16,829 cases of adolescent anemia
  - 17,791 cases of anemia in pregnancy

- **Cost per DALY averted**: 39,162 KSh (376 USD)
- **Benefit-cost ratio**: 9:1