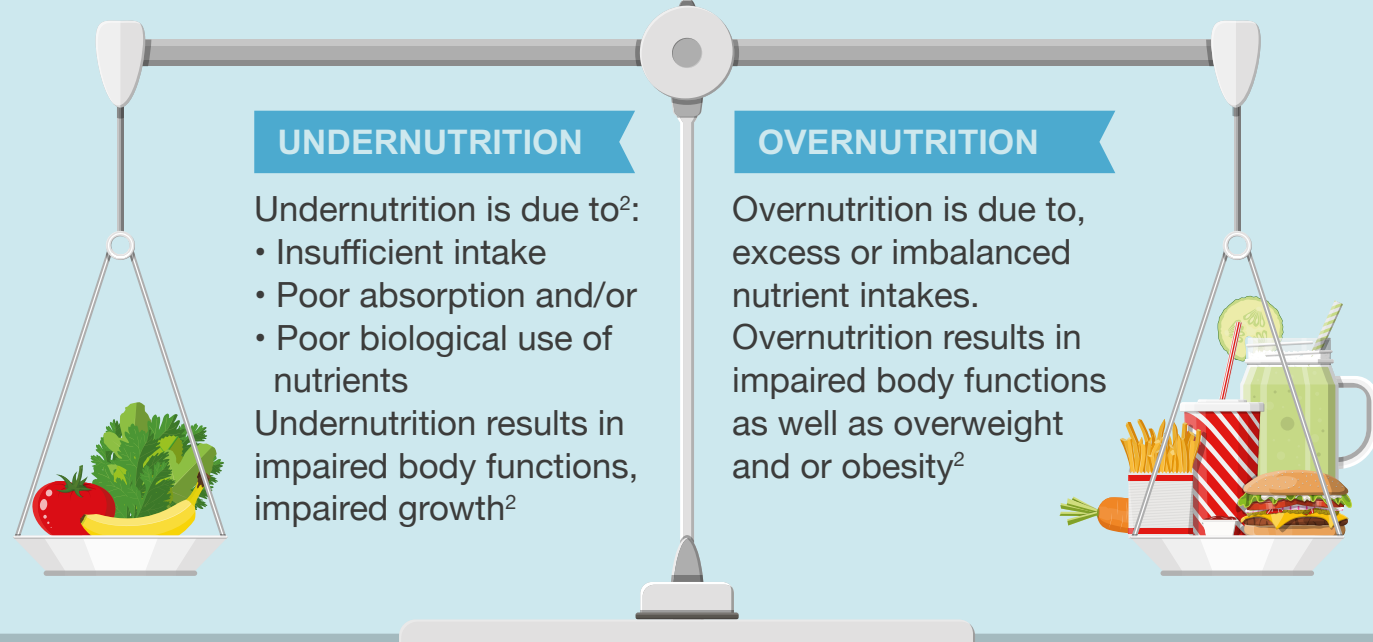


# DOUBLE BURDEN OF MALNUTRITION

## CURRENT STATUS AND GOVERNMENT INTERVENTION

The Double Burden of Malnutrition (DBM) is characterized by the coexistence of undernutrition along with overweight, obesity or diet – related Non-communicable diseases (NCDs). Malnutrition refers to nutritional deficiencies or excesses of macronutrients and micronutrients<sup>1</sup>.



## CONSEQUENCES OF DOUBLE BURDEN OF MALNUTRITION:

### SHORT TERM CONSEQUENCES<sup>3</sup>:

- Decreased likelihood of finishing school
- Reduced economic productivity in later life

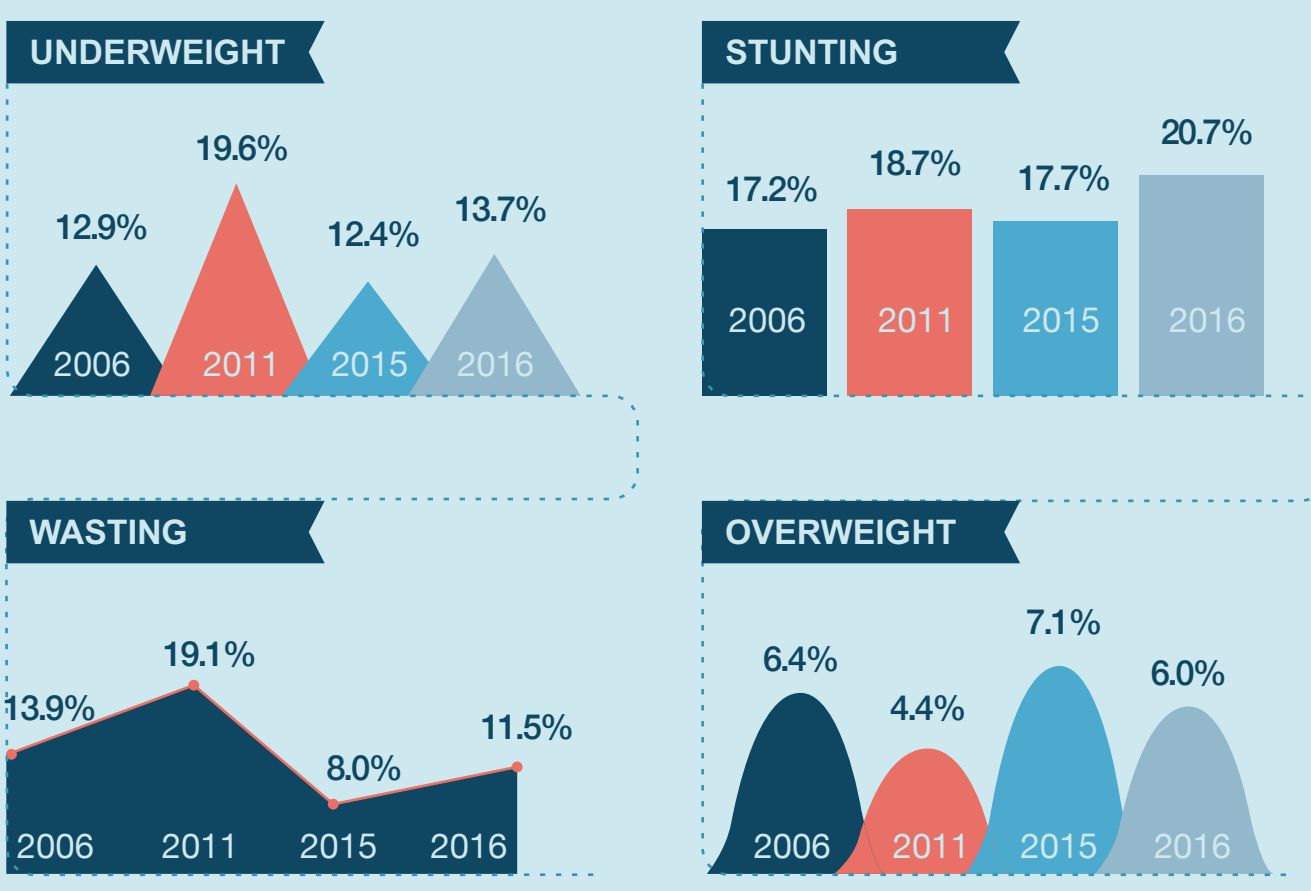
### LONG TERM CONSEQUENCES:

- Overweight and obesity in later life<sup>4</sup>

DBM also has economic consequences for the country i.e. loss of GDP and higher health care costs<sup>2</sup>

The National Health and Morbidity Surveys conducted by the Ministry of Health Malaysia (MOH) recognized the existence of Double Burden of Malnutrition in the country<sup>5-8</sup>:

## PREVALENCE OF MALNUTRITION INDICATORS FROM NHMS 2006, 2011, 2015, 2016<sup>5-8</sup>.



The highest prevalence of overweight (9.2%) was noted amongst children 24 – 35 months.

However local studies have reported a higher prevalence of overweight/ obesity ranging from 7.9-21.6%<sup>9-12</sup>

## REASONS FOR DOUBLE BURDEN OF MALNUTRITION:

### UNDERNUTRITION

may be attributed to:

- Inadequate complementary feeding
  - Low birth weight
- A study of 300 children between 6 – 24 months of age showed:
- Only 68.8% of breast-fed infants and 34.6% of non – breast fed infants had minimal acceptable diet<sup>13</sup>
  - Only 56.3% of children achieved their recommended energy intakes<sup>13</sup>
  - Incidence of low birth weight (< 2500g):
    - Per NHMS 2016: 9.7 %<sup>7</sup>
    - Per Malaysia National Neonatal Registry 2016: 16.4%<sup>14</sup>

### OVERWEIGHT AND OBESITY

may be attributed to:

- Low level of physical activity
  - Increased popularity of screen – based activities
- A study conducted in children 4 – 6 years of age showed<sup>15</sup>:
- Only 38.2% of urban children and 48.7% of rural children had a daily active play time of >2 hr/d
  - 25.7% of urban children and 32.7% of rural children spent >2 hr /d on screen-based activities

MOH MALAYSIA HAS DRAFTED THE NATIONAL PLAN OF ACTION FOR NUTRITION OF MALAYSIA (NPANM) III 2016 - 2025 TO ADDRESS THE PERSISTENCE OF THE DOUBLE BURDEN OF MALNUTRITION<sup>16</sup>

### PROGRAMS UNDER THE NPANM III (2016 - 2025)

1 Focus on menu development and preparation, nutrition education, monitoring of nutritional status in government childcare centres, nurseries and preschools

2 Provide food through Supplementary Food Programs and Milk Programs to encourage milk intake and improve the nutritional status of children from low income families

3 Educate food operators through “Healthy Catering Initiatives” that improve knowledge and skills on healthy and safe food preparation.

Nutrition Society of Malaysia also conducts roadshows in preschools and primary schools on healthy eating and active living during National Nutrition Month Malaysia (NMM) in April every year.

### THROUGH THESE INITIATIVES BY 2025 THE MOH MALAYSIA AIMS TO:

- Decrease underweight and wasting to < 5% in children below 5
- Decrease stunting to <11% in children below 5
- Ensure there is no increase in the rates of childhood obesity

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This infographic is developed in collaboration with Prof. Dr. Zallilah Mohd Shariff, Universiti Putra Malaysia.