Nutrition – an investment in human capital

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WHERE?

MALNUTRITION AFFECTS ALL REGIONS WORLDWIDE

1.9 BILLION
ADULTS, 18 years and older, are overweight

>600 MILLION
of these are OBESE

41 MILLION
children under the age of 5 years are overweight or obese

155 MILLION
children are stunted (too short for age)

462 MILLION
ADULTS are underweight

264 MILLION
WOMEN of reproductive age are affected by iron-amenable anaemia

52 MILLION
children are wasted (too thin for height)

Most common form of undernutrition (protein-energy/micronutrients)

Affects infants before and early after birth

Linked to maternal size, nutrition during pregnancy & foetal growth

Length that is lost early on is rarely recovered

Stunted have less lean body mass (lower energy expenditure)
WHAT?

THE DOUBLE BURDEN OF MALNUTRITION IS CHARACTERIZED BY THE COEXISTENCE OF:

- Undernutrition (wasting, stunting and micronutrient deficiencies) along with overweight and obesity
- and diet-related noncommunicable diseases
- within individuals, households and populations
- throughout life

INDIVIDUALS
with the simultaneous presence of two or more types of malnutrition, or development of multiple types over a lifetime

HOUSEHOLDS
with multiple family members affected by different forms of malnutrition

POPULATIONS
with both undernutrition and overweight prevalent in the same community, region or nation
Causes of Malnutrition

- Baby low birthweight
  - Maternal low gestational weight gain
  - Inadequate dietary intake
- Undernourished Child (Underweight/Stunted) (0-5 y)
  - Poor breastfeeding & complementary feeding practices
  - Recurrent infections
  - Poor care practices
- Malnourished Adolescent
  - Maternal low gestational weight gain
  - Inadequate dietary intake
  - Unhealthy diet
  - Low physical activity/sedentary behavior
- Malnourished Adult
  - Low physical activity/sedentary behavior
- Malnourished Women
  - Low physical activity/sedentary behavior
  - Poor work capacity
  - ↑ risk of NRCD
- Malnourished Elderly
  - Low physical activity/sedentary behavior
  - Poor care practices

Unhealthy diet

Low physical activity/sedentary behavior
Human and Economic Impact of Undernutrition Worldwide

Human Cost

3.1 million child deaths annually or 45% percent of all child deaths are attributable to undernutrition (The Lancet 2013). It is the largest single contributor to child mortality worldwide.

Economic Cost

Productivity losses to individuals are estimated at more than 10% of lifetime earnings, and losses to gross domestic product may be as high as 2–3 percent (World Bank 2010).
Proportion of global deaths < 70 yrs by cause of death, comparable estimates 2012

WHO. Global Status Report on Non-communicable Diseases 2014
Investment in Human Capital

Determinants of loss

Level below which symptoms may occur

-280 d  + 720 d
FIRST 1000 DAYS

Sensitive period

LAST 1000 DAYS
RATIO > 100:1
Where do we want to be by 2025/2030?

GLOBAL NUTRITION TARGETS FOR 2025

- **CHILD STUNTING**: Cut the number of stunted children by 40%.
- **CHILD WASTING**: Reduce and maintain child wasting to less than 5%.
- **CHILD OVERWEIGHT**: No increase in childhood overweight.
- **ANEMIA**: Cut anemia in women of reproductive age by 50%.
- **EXCLUSIVE BREASTFEEDING**: Increase to at least 50%.
- **LOW BIRTH WEIGHT**: Cut low birth weight by 30%.

HALT THE RISE IN PREVALENCE OF:

- **ADULT OVERWEIGHT**
- **ADULT DIABETES** (high blood sugar)
- **ADULT OBESITY**
The New Context – SDGs by 2030

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

NUTRITION

at the heart
Every $1 invested
of the SDGs
gives $16 return

Ensure healthy lives and promote well-being for all at all ages
Double-duty Actions for Malnutrition

Overweight and obesity + Undernutrition = THE DOUBLE BURDEN OF MALNUTRITION

POTENTIAL CANDIDATES FOR DOUBLE-DUTY ACTIONS:

- Protections and promotion of exclusive breastfeeding
- Actions to optimize early nutrition
- Maternal nutrition and antenatal care programmes
- School food policies and programmes
- Marketing regulations
